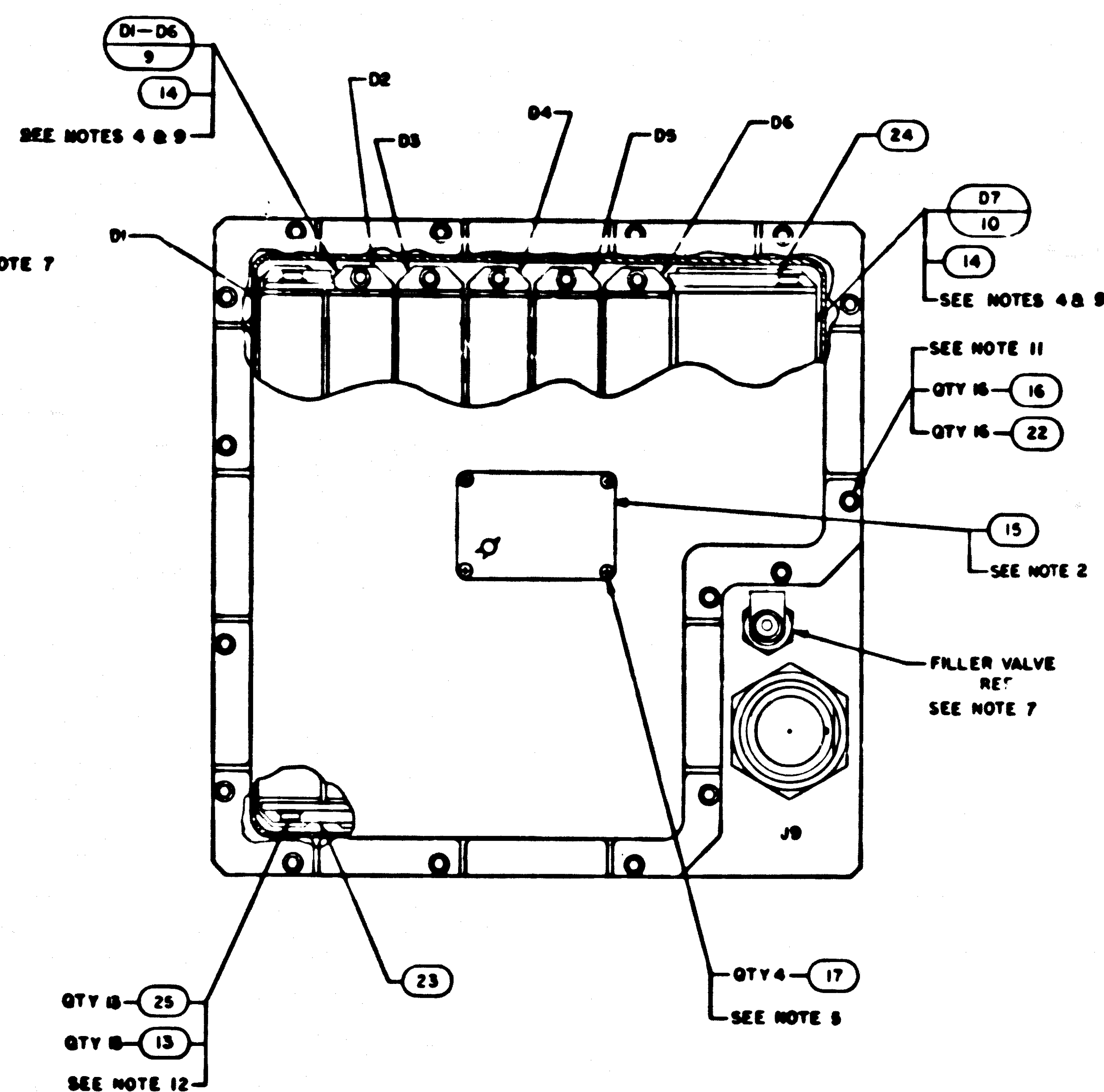
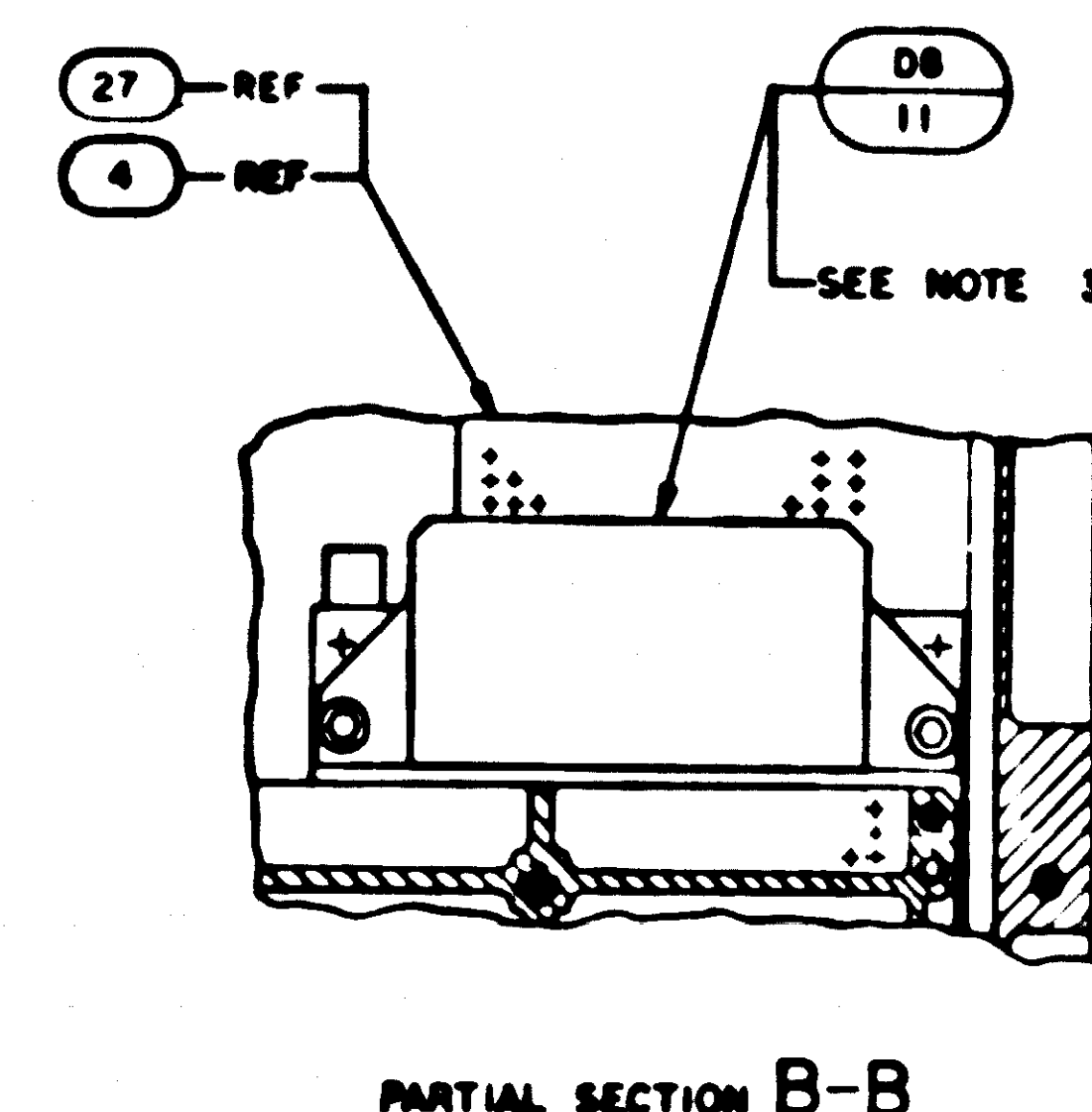
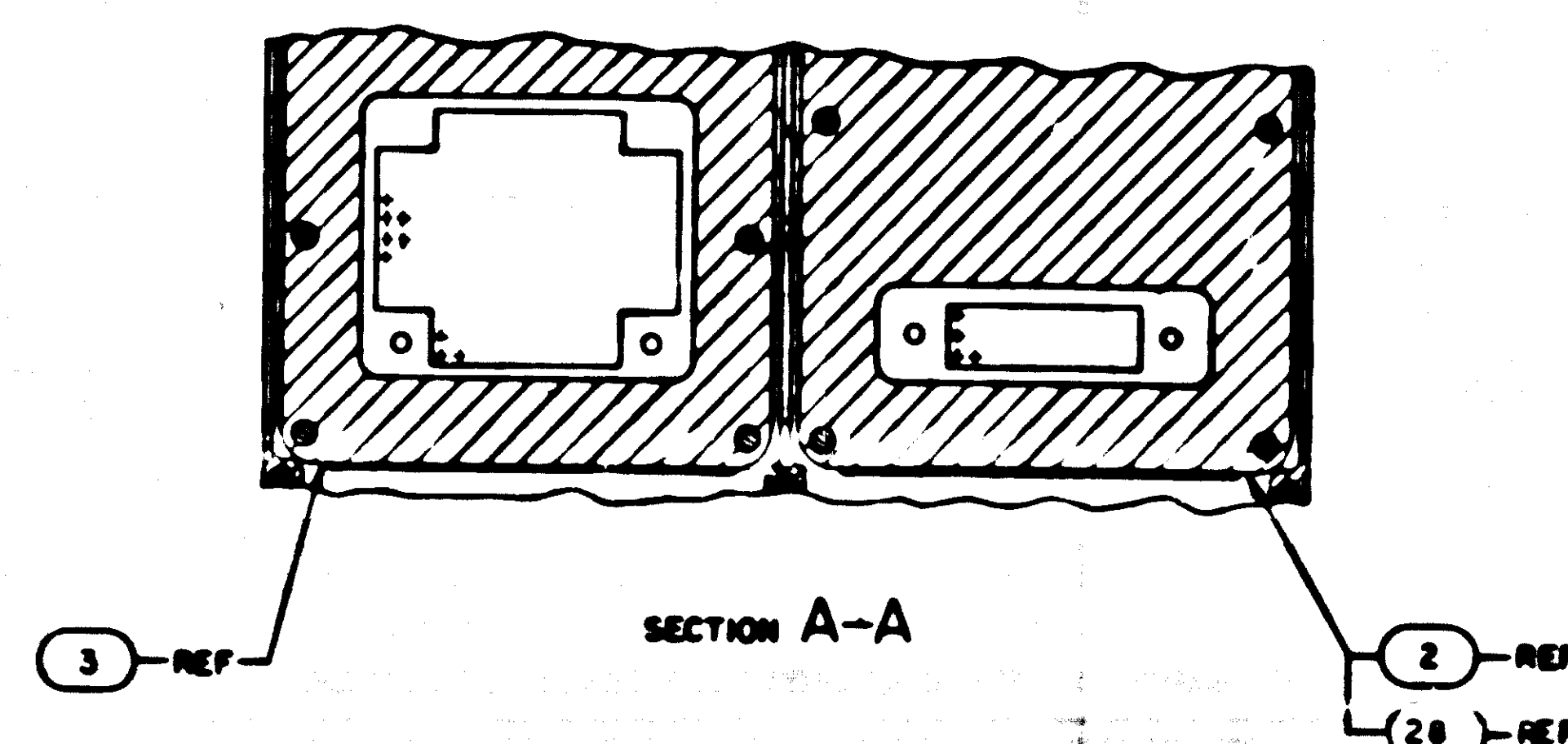


- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MARKING: DSKY ASSEMBLY AND ITS RESPECTIVE PART NO., SERIAL NO., AND CONTRACT NO.
 3. MARKING TO BE PER MIL-STD-2000 AND SERIALIZE PER MIL-STD-2000
 4. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 TO BE 8.5-9.5 INCH POUNDS
 5. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9 & 10 TO BE 18-19 INCH POUNDS
 6. APPLY SEALING COMPOUND MIL-S-22473 GRADE HV TO FIND NO. 17
 7. FIND NO. 2 AND 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 4 USING FIND NO. 19. BEFORE INSTALLING FIND NO. 12, ASSEMBLE IN AN ENVIRONMENT HAVING A TEMPERATURE OF 72° ± 5° AND A RELATIVE HUMIDITY OF 50% OR LESS
 8. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM OF 4.5% AIR TO 105/110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
 9. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS OF PS2003934
 10. APPLY FIND NO. 14 TO INTERFACE SURFACES OF THE FOLLOWING FIND NO.'S: 142, 443, 519 AND 5410. DO NOT APPLY FIND NO. 14 TO BONDED RUBBER SURFACES, TAPPED HOLES, OR MOUNTING HARDWARE.
 11. AR DENOTES AS REQUIRED
 12. MOUNTING TORQUE FOR FIND NO. 16, 18 AND 12 TO BE 8-9 INCH POUNDS
 13. MOUNTING TORQUE FOR FIND NO. 13 TO BE 3.5-4.5 INCH POUNDS
 14. FIND NO. 2 TO BE EITHER 1006387-002 OR 1006387-003

- REF. DWGS
1. UNIVERSAL DSKY SHIPPING CONTAINER 1006422
 2. DSKY CONNECTOR COVER 1006425-14
 3. UNIVERSAL DSKY HANDLING FIXTURE 2014013

QTY	PART OR IDENTIFYING NO.	DESCRIPTION	QTY	DESCRIPTION	QTY	DESCRIPTION
1	2003956	OUTLINE DRAWING	REF			
1	2005957	SIGNAL PIN ASSIGNMENT	REF			
1	2005954	INTERCONNECTING DIAGRAM	REF			
1	2005958	SIGNAL FLOW DIAGRAM	REF			
1	1004260-20	NAMEPLATE	5			
1	1004260-20	SILICONE COMPOUND	14			
1	MS16995-10	SCREW, HEX SOCKET HEAD	13			
1	MS16995-20	SCREW, HEX SOCKET HEAD	12			
1	2003909-031	KEYBOARD MODULE ASSY DB	11			
1	2003901-031	POWER SUPPLY ASSY MODULE DT	10			
1	2003952-031	INDICATOR DRIVER MODULE DI-D6	9			
1	1006349	GASKET, BONDED, RUBBER	8			
1	1006350	GASKET, BONDED, RUBBER	7			
1	2004900	COVER, REAR	6			
1	2003-5-011	MAIN HOUSING ASSY	5			
1	2003949-021	FRONT HOUSING ASSY	4			
1	1006315-001	INDICATOR, DIGITAL	3			
1	SEE NOTE 13	INDICATOR, ALARM	2			
1	2004929-021	COVER, FRONT	1			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS DO NOT SCALE THIS DRAWING MATERIAL	TEST TREATMENT NADA APPROVAL DATE BY	TEST ASBY USED ON FINAL POSITION	APPLICATION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS DO NOT SCALE THIS DRAWING MATERIAL	TEST TREATMENT NADA APPROVAL DATE BY	TEST ASBY USED ON FINAL POSITION	APPLICATION
MANNED SPACECRAFT CENTER HOUSTON, TEXAS AGC DSKY ASSEMBLY				CODE IDENT NO. SIZE 80230 J 2003994 SCALE 1/1			



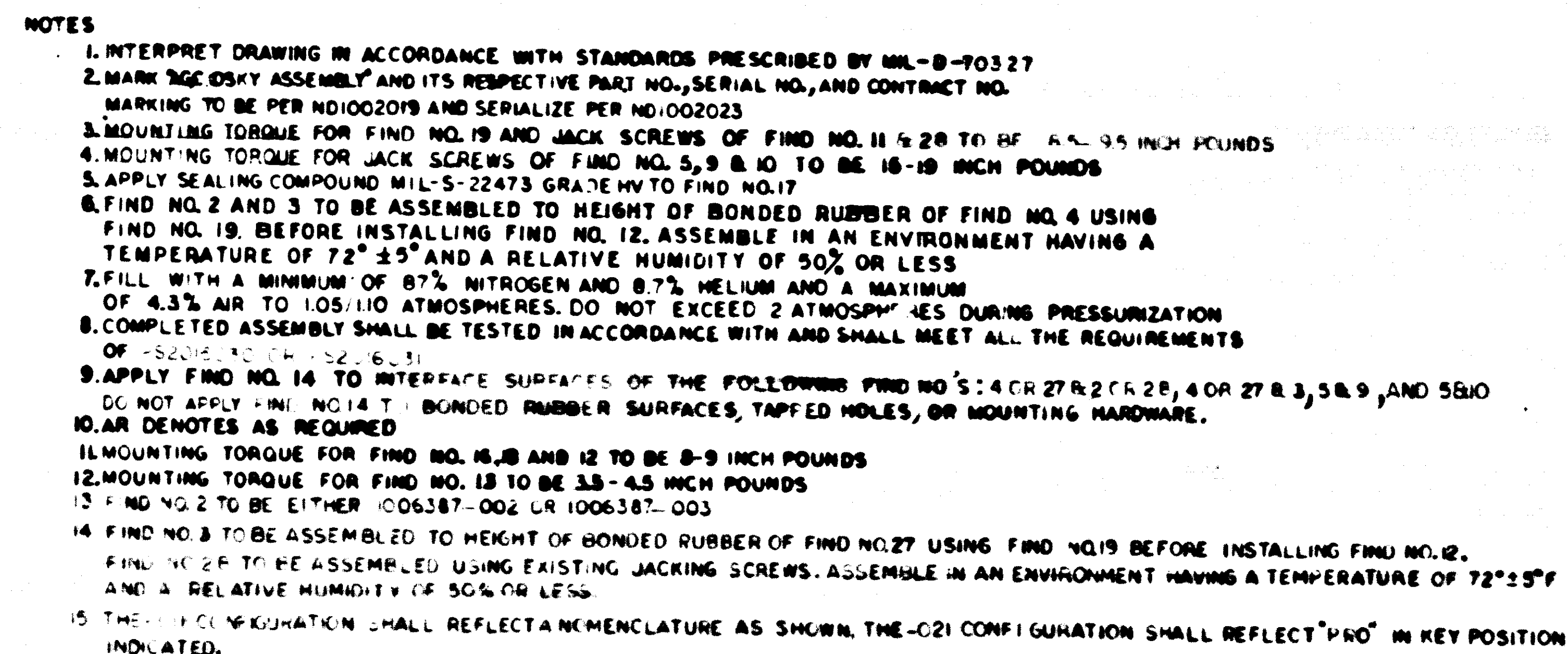
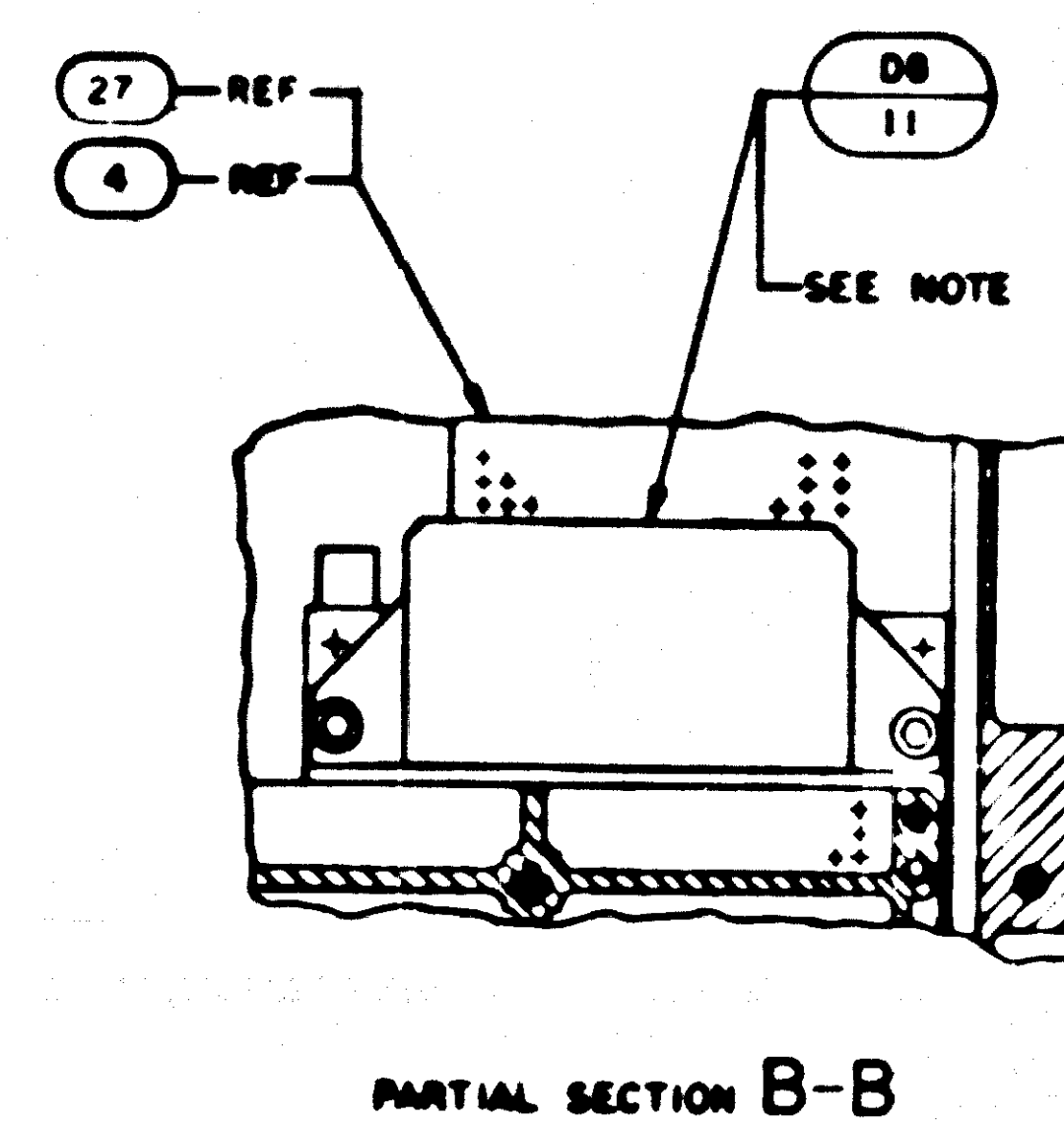
- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MARKING TO BE PER JACK SCREW ASSEMBLY AND ITS RESPECTIVE PART NO., SERIAL NO., AND CONTRACT NO.
DRAWING TO BE PER MD1002019 AND SERIALIZE PER MD1002023
 3. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 & 20 TO BE 6.5-9.5 INCH POUNDS
 4. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9 & 10 TO BE 18-10 INCH POUNDS
 5. APPLY SEALING COMPOUND MIL-S-22473 GRADE HV10 TO FIND NO. 17
 6. FIND NO. 2 AND 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 4 USING
FIND NO. 19. BEFORE INSTALLING FIND NO. 12 ASSEMBLY IN AN ENVIRONMENT HAVING A
TEMPERATURE OF 72° ±5° AND A RELATIVE HUMIDITY OF 50% OR LESS
 7. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM
OF 4.3% AIR TO 105.110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
 8. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS
OF PS2003934
 9. APPLY FIND NO. 14 TO INTERFACE SURFACES OF THE FOLLOWING FIND NO.'S: 4 OR 27, 2, 25, 2, 4, 27 & 3, 5 & 9 AND 5810
DO NOT APPLY FIND NO. 13 TO BONDED RUBBER SURFACES, TAPPED HOLES, OR MOUNTING HARDWARE.
 10. AIR DENOTES AS REQUIRED
 11. MOUNTING TORQUE FOR FIND NO. 14, 10 AND 12 TO BE 8-9 INCH POUNDS
 12. MOUNTING TORQUE FOR FIND NO. 18 TO BE 3.3-4.5 INCH POUNDS
 13. FIND NO. 2 TO BE EITHER 006387-002 OR 1066387-003
 14. FIND NO. 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 27 USING FIND NO. 19 BEFORE INSTALLING FIND NO. 12.
FIND NO. 2 TO BE ASSEMBLED USING EXISTING JACKING SCREWS. ASSEMBLE IN AN ENVIRONMENT HAVING A TEMPERATURE OF 72° ±5°F
AND A RELATIVE HUMIDITY OF 50% OR LESS
 15. THE CONFIGURATION SHALL REFLECT A Nomenclature AS SHOWN, THE -C21 CONFIGURATION SHALL REFLECT "PWO" IN KEY POSITION
INDICATED.

REF. DWG#		
1	UNIVERSAL DSKY SHIPPING CONTAINER	1006422
2	DSKY CONNECTOR COVER	1006425-14
3	UNIVERSAL DSKY HANDLING FIXTURE	2014013

-C21	1 THRU 5, 7 THRU 12, 14 & 15
-011	1 THRU 13 & 15
DASH NO.	APPLICABLE NOTES
NOTE APPLICATION	

[illegible]

		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE		INSTRUMENTATION LAB CHAMBER DRAWN		LIST OF MATERIALS		MANNED SPACECRAFT CENTER HEBUSTON PERMS	
		FRACTIONS DECIMALS ANGLES		DATE					
		DO NOT SCALE THIS DRAWING MATERIAL		CHECKED				AGC DSKY ASSEMBLY	
				APPROVAL					
				APPROVAL					
		HEAT TREATMENT		MESH APPROVAL		CODE IDENT NO		SIZE	MESH GRINDING NO
NEXT APPR		USED UP		MESH FINISH		802303		J	2003994
APPLICATION				SEE APPROVAL		SCALE		IN	UNIT



REF. DWGS		
1	UNIVERSAL DSKY SHIPPING CONTAINER	1006422
2	DSKY CONNECTOR COVER	1006425-14
3	UNIVERSAL DSKY HANDLING FIXTURE	2014013

-021	1 THRU 5, 7 THRU 12, 14 & 15
-011	1 THRU 13 & 15
DASH NO.	APPLICABLE NOTES
NOTE APPLICATION	

[illegible]

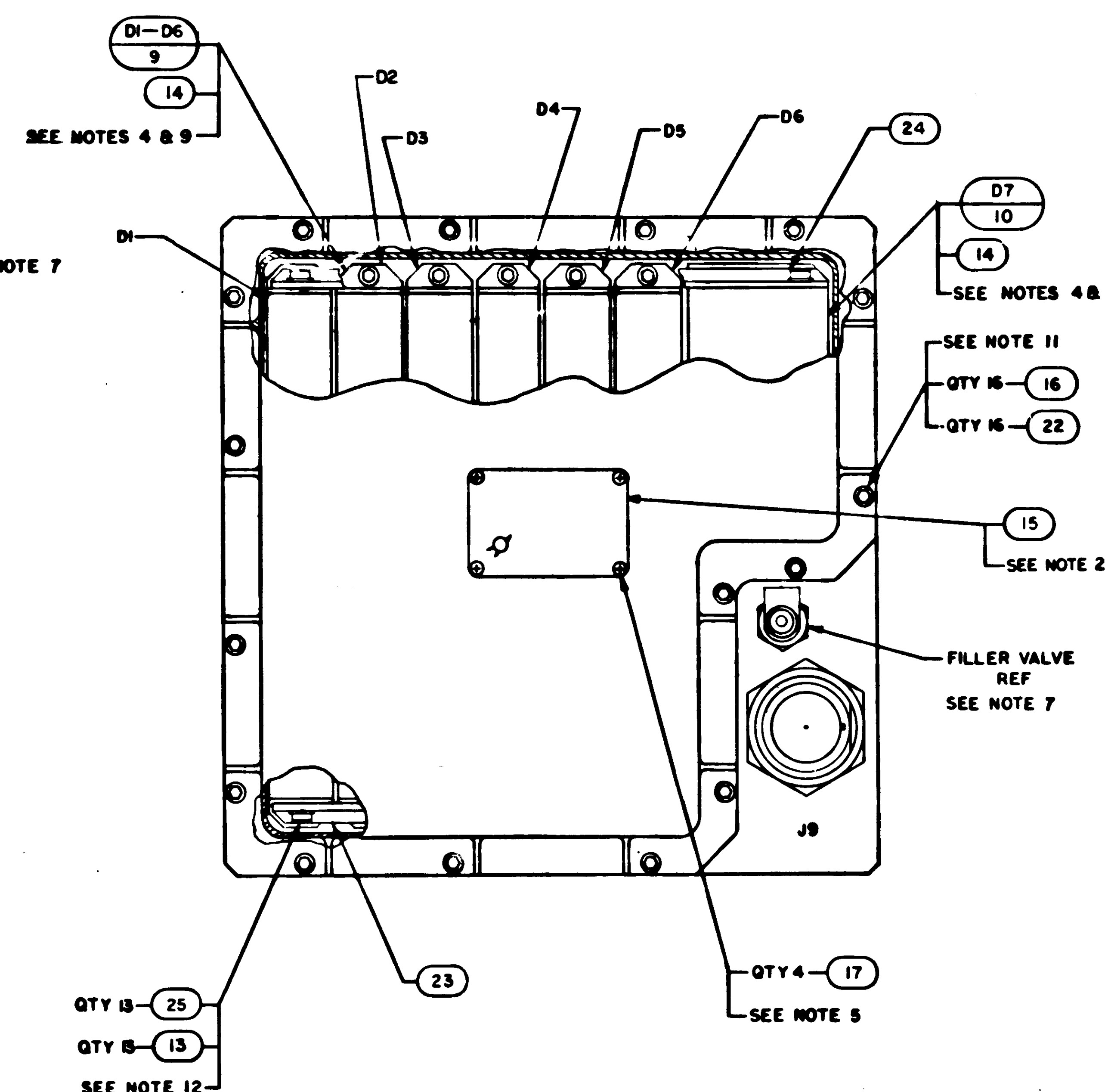
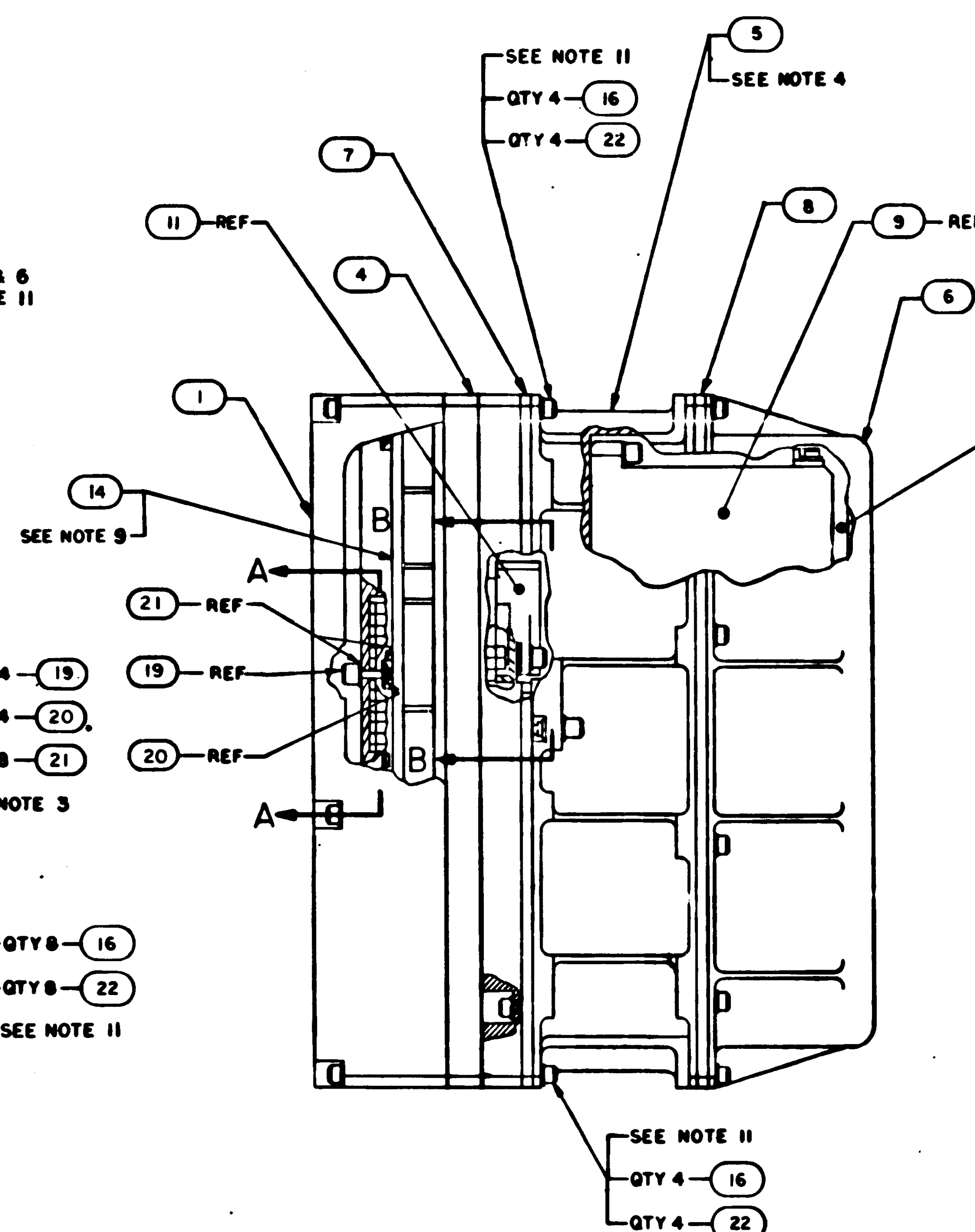
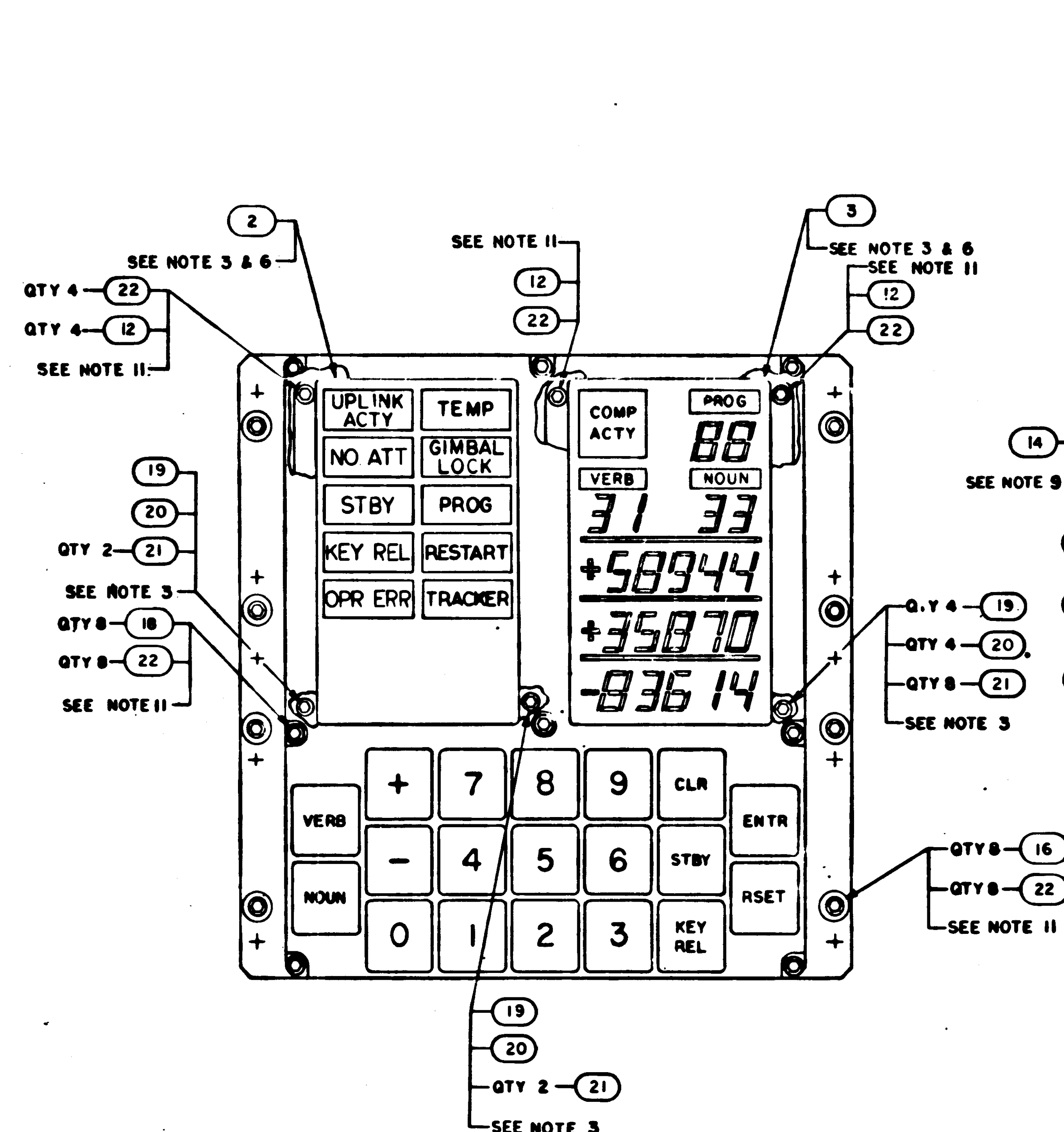
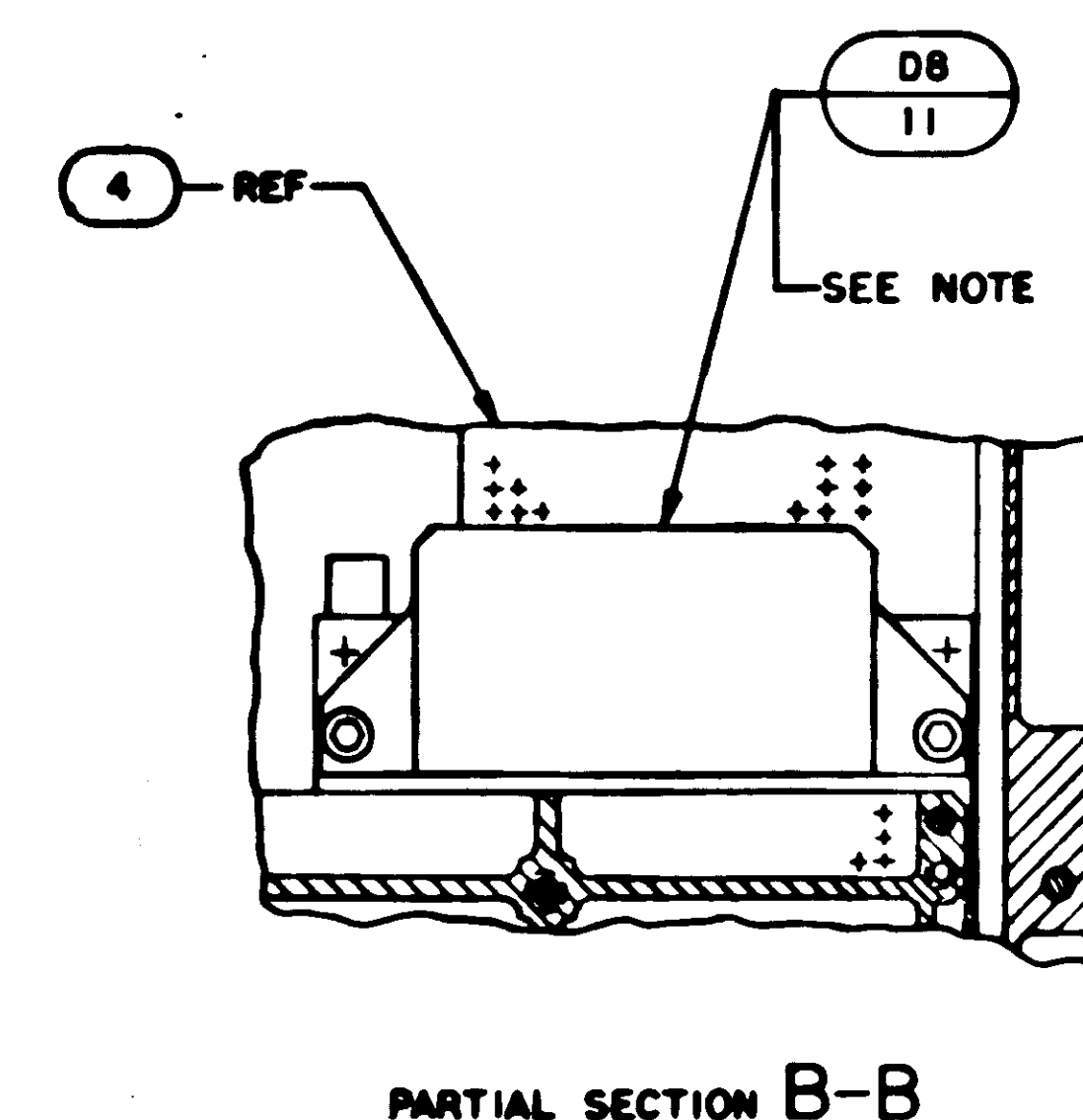
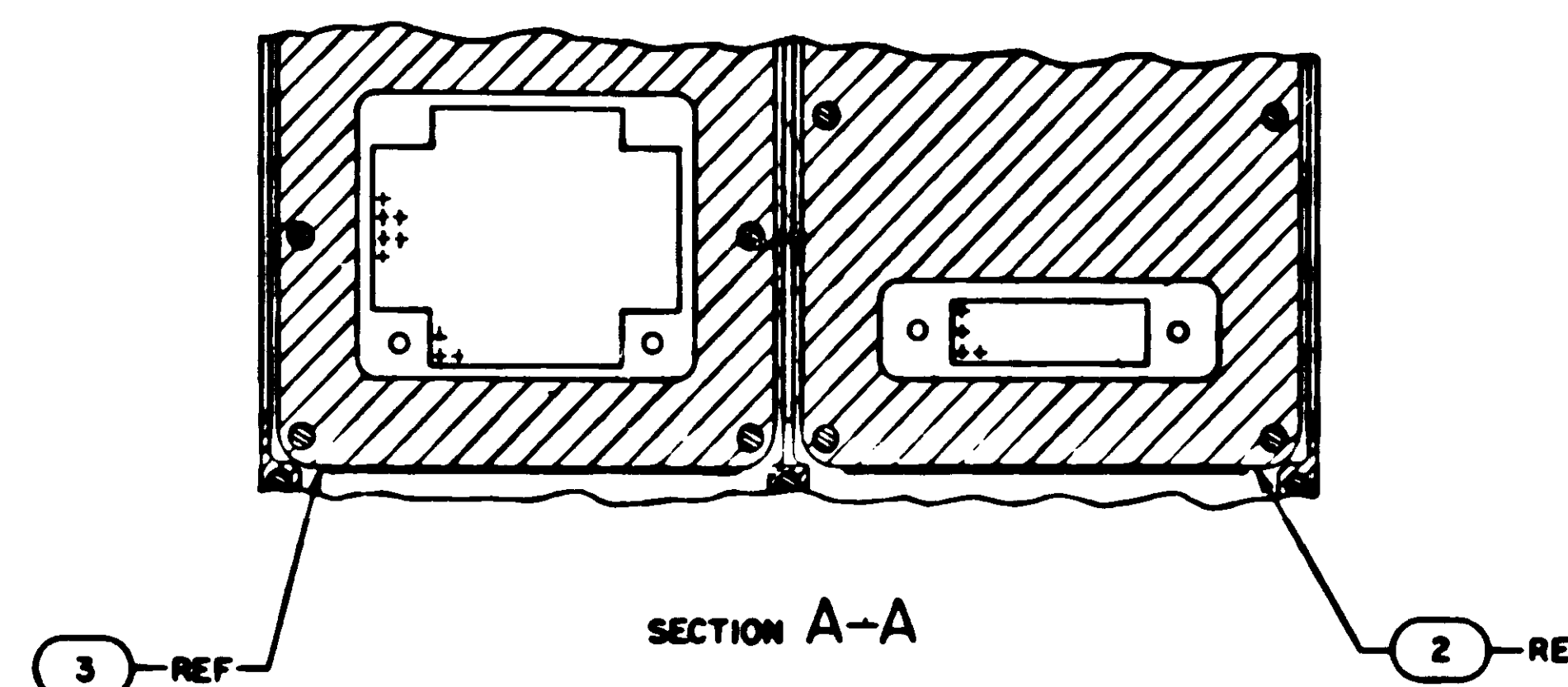
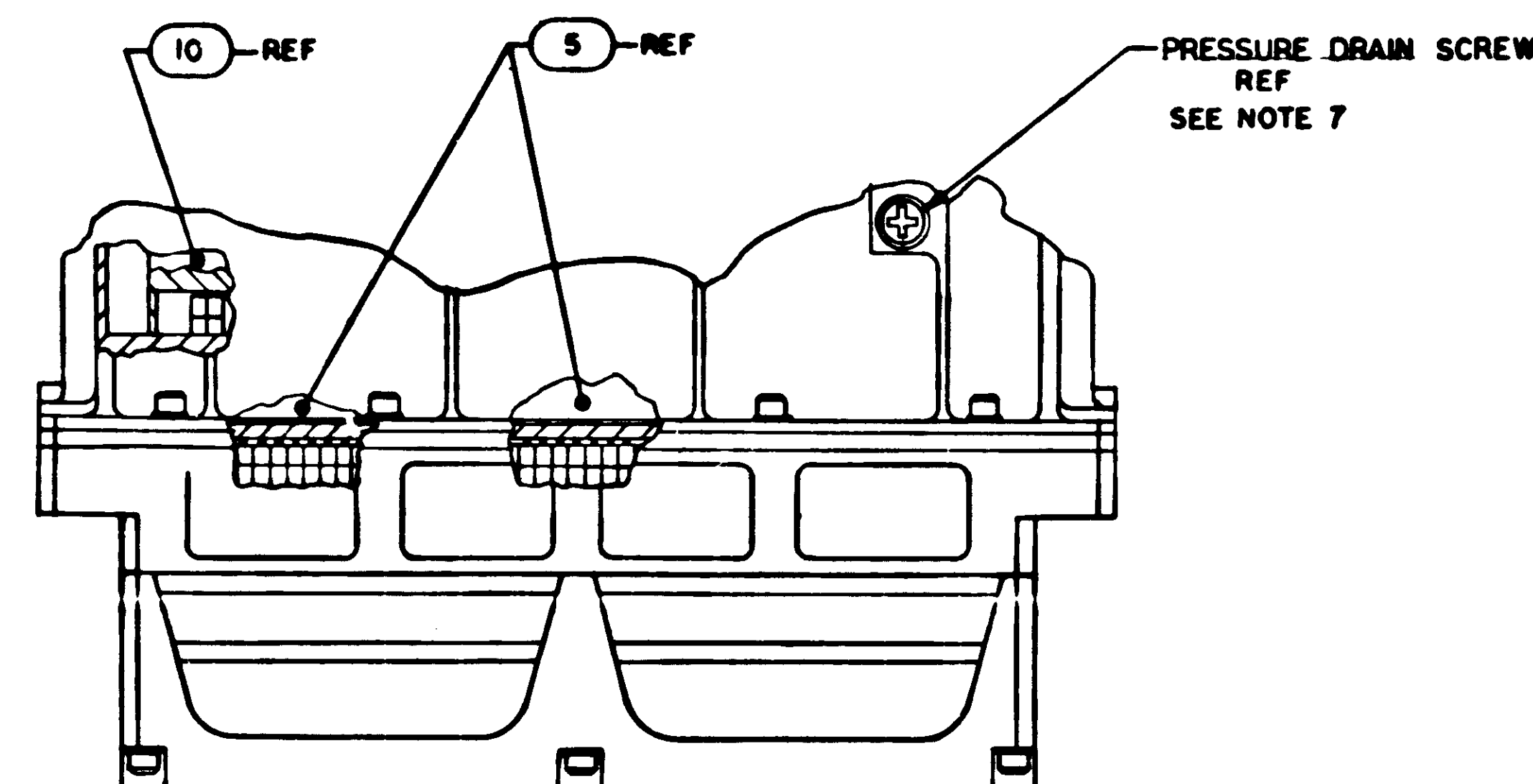
[C2] [01]		LIST OF MATERIALS	
WARE OTHERS SPEC'D DIMENSIONS ARE IN INCHES TOLERANCES UN FINISHES SPECIFIED MATERIALS		MANAGED SPACECRAFT CENTER 401-77-1145	
DO NOT SCALE THIS DRAWING MATERIAL		AGC DSKY ASSEMBLY	
BEST VIEW		CODE IDENT NO 80230	
BEST APP USED ON		QTY 1	
APPLICATOR		DATE 10-1-68	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES UNLESS OTHERWISE SPECIFIED		MATERIAL SPECIFICATION - LAB DRAWING NO. _____ DATE _____		LIST OF MATERIALS MANAGED SPACECRAFT CENTER HOUSTON TEXAS	
FRACTIONS DECIMALS ANGLES DO NOT SCALE THIS DRAWING MATERIALS		CHECKED _____ APPROVED _____ APPROVAL _____		AGC DSKY ASSEMBLY	
HEAT TREATMENT PART NUMBER		MARK APPROVAL _____ DATE APPROVAL _____		CASE NO. _____ 802330 J MARK DIMENSIONS NO. _____ 2003994	
NEXT REV. _____ USED ON _____		SEE APPROVAL _____ SCALE 1/1		SHEET 1 OF 1	

2003994

2003994A

REVISIONS
INITIALS DATE



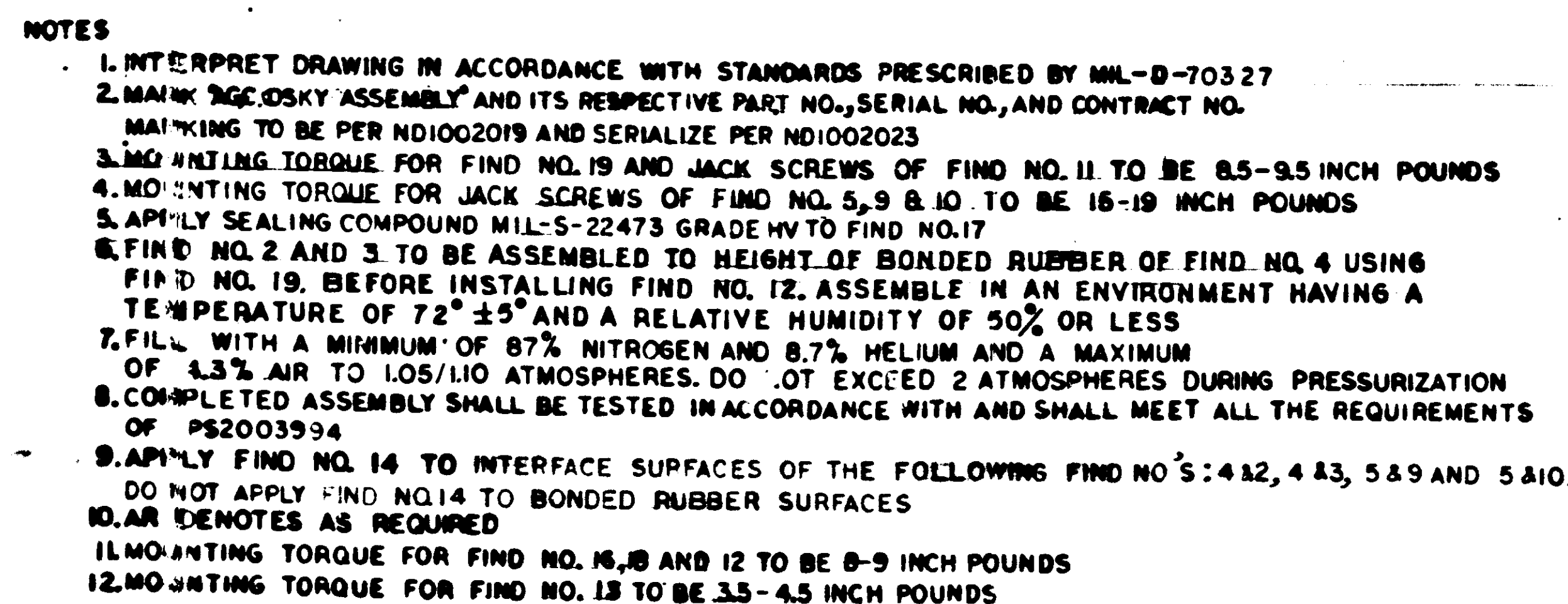
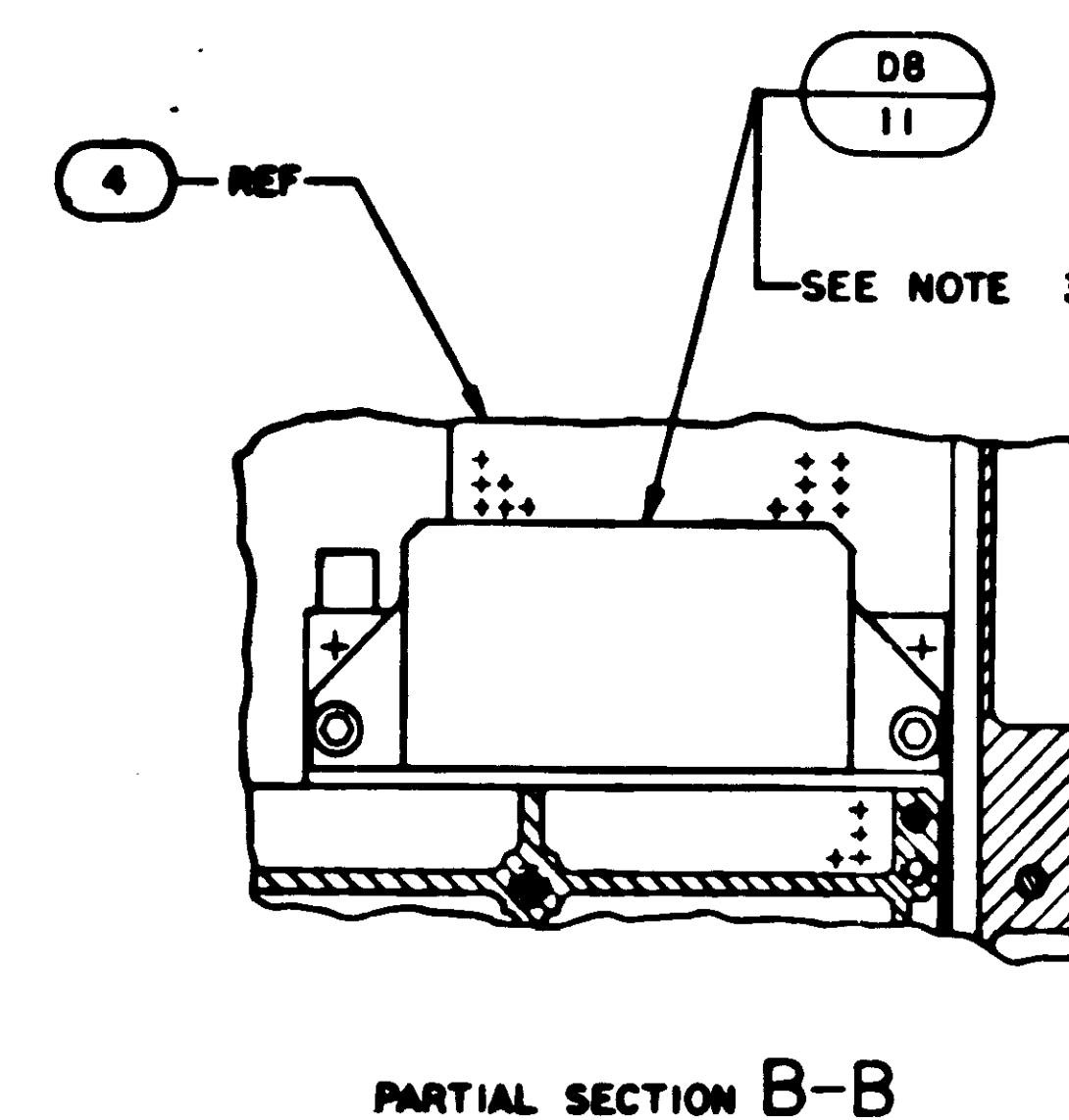
- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MARK "AGC DSKY ASSEMBLY" AND ITS RESPECTIVE PART NO., SERIAL NO., AND CONTRACT NO. MARKING TO BE PER ND1002019 AND SERIALIZE PER ND1002023
 3. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 TO BE 0.5-0.5 INCH POUNDS
 4. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9 & 10 TO BE 16-19 INCH POUNDS
 5. APPLY SEALING COMPOUND MIL-5-22473 GRADE HV TO FIND NO. 17
 6. FIND NO. 2 AND 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 4 USING FIND NO. 19. BEFORE INSTALLING FIND NO. 12, ASSEMBLE IN AN ENVIRONMENT HAVING A TEMPERATURE OF $72^{\circ} \pm 5^{\circ}$ AND A RELATIVE HUMIDITY OF 50% OR LESS
 7. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM OF 4.3% AIR TO 1.02 LIO ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
 8. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS OF PS2003994
 9. APPLY FIND NO. 14 TO INTERFACE SURFACES OF THE FOLLOWING FIND NO'S: 4 & 2, 4 & 3, 5 & 9 AND 5 & 10. DO NOT APPLY FIND NO. 14 TO BONDED RUBBER SURFACES
 10. AR DENOTES AS REQUIRED
 11. MOUNTING TORQUE FOR FIND NO. 16, 18 AND 12 TO BE 0-9 INCH POUNDS
 12. MOUNTING TORQUE FOR FIND NO. 13 TO BE 3.5-4.5 INCH POUNDS

- REF. DWGS
1. UNIVERSAL DSKY SHIPPING CONTAINER 1006422
 2. DSKY CONNECTOR COVER 1006425-14
 3. UNIVERSAL DSKY HANDLING FIXTURE 2014013

QTY	PART OR IDENTIFYING NO.	DESCRIPTION
13	NS1620C4	WASHER, FLAT
1	2004958	BRACKET, MODULE
1	2004959	BRACKET, MODULE
46	NS1620C6	WASHER, FLAT
12	1004546-4	WASHER, FLAT
6	MS16633-4014	RING, RETAINING
6	2004932-001	SCREW, JACKING
8	1001489-59	SCREW, HEX SOCKET HEAD
4	MS35216-1	SCREW, PAN HEAD, CROSS RECESSED
32	MS16995-18	SCREW, HEX SOCKET HEAD
1	1004260-20	NAMEPLATE
AR	1006879	SILICONE COMPOUND
13	NS16995-10	SCREW, HEX SOCKET HEAD
6	MS16995-20	SCREW, HEX SOCKET HEAD
1	2003909-031	KEYBOARD MODULE ASSY D6
1	2003901-031	POWER SUPPLY ASSY MODULE D7
6	2003952-031	INDICATOR DRIVER MODULE D1-D6
1	1006349	GASKET, BONDED, RUBBER
1	1006350	GASKET, BONDED, RUBBER
1	2004900	COVER, REAR
1	2003615-011	MAIN HOUSING ASSY
1	2003949-021	FRONT HOUSING ASSY
1	1006315-001	INDICATOR, DIGITAL
1	1006387-001	INDICATOR, ALARM
1	2004929-021	COVER, FRONT

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS OR DECIMALS		MANNED SPACECRAFT CENTER HECTOR, TEXAS	
DO NOT SCALE THIS DRAWING		AGC DSKY ASSEMBLY	
HEAT TREATMENT		CODE IDENT NO. 80230 J	
NEXT ASSY		SCALE 1/1	
APPLICATION		SHEET 1	

17-2003994



REF. DWG'S	
1. UNIVERSAL DSKY SHIPPING CONTAINER	1006422
2. DSKY CONNECTOR COVER	1006425-14
3. UNIVERSAL DSKY HANDLING FIXTURE	2014013

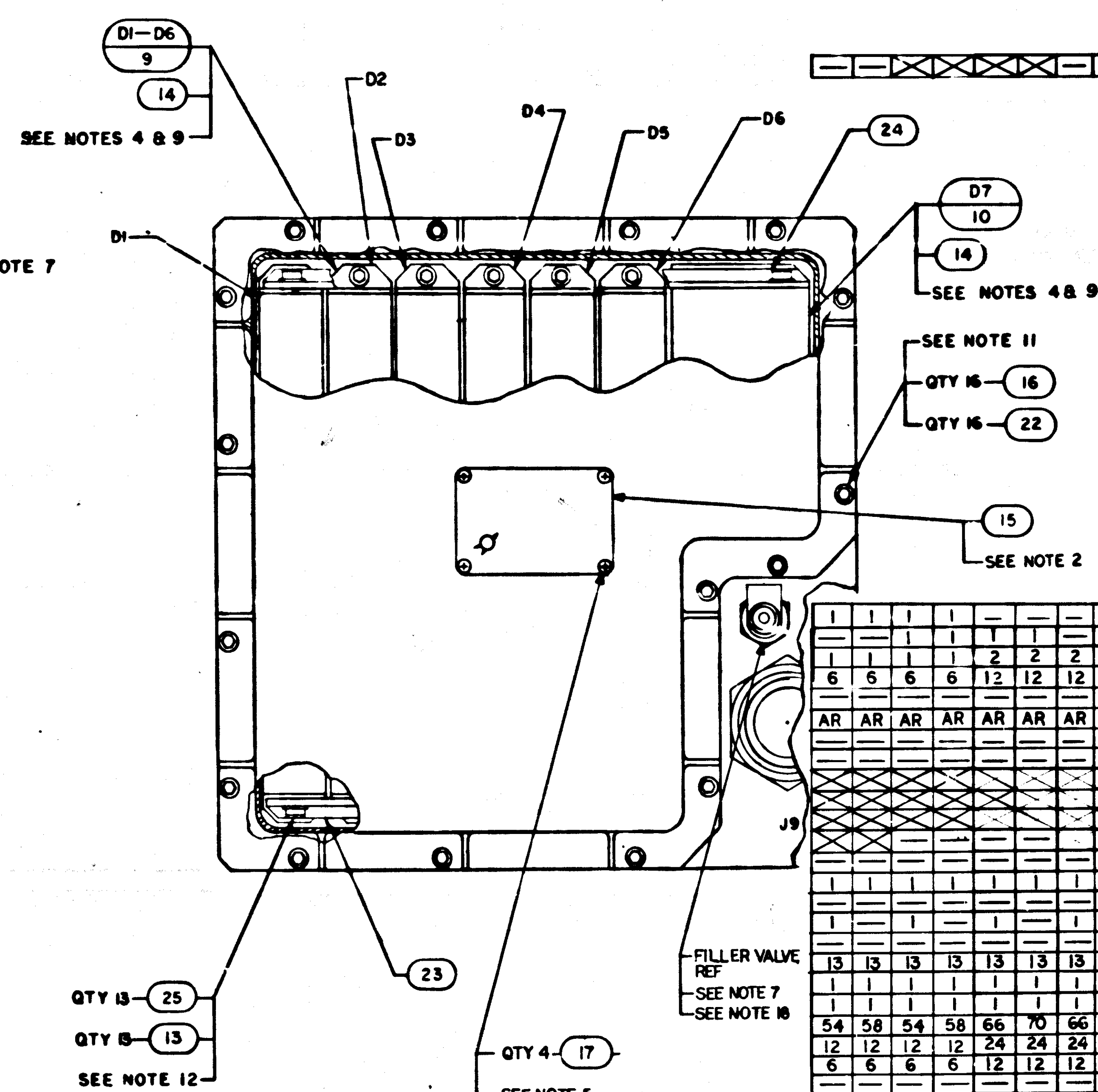
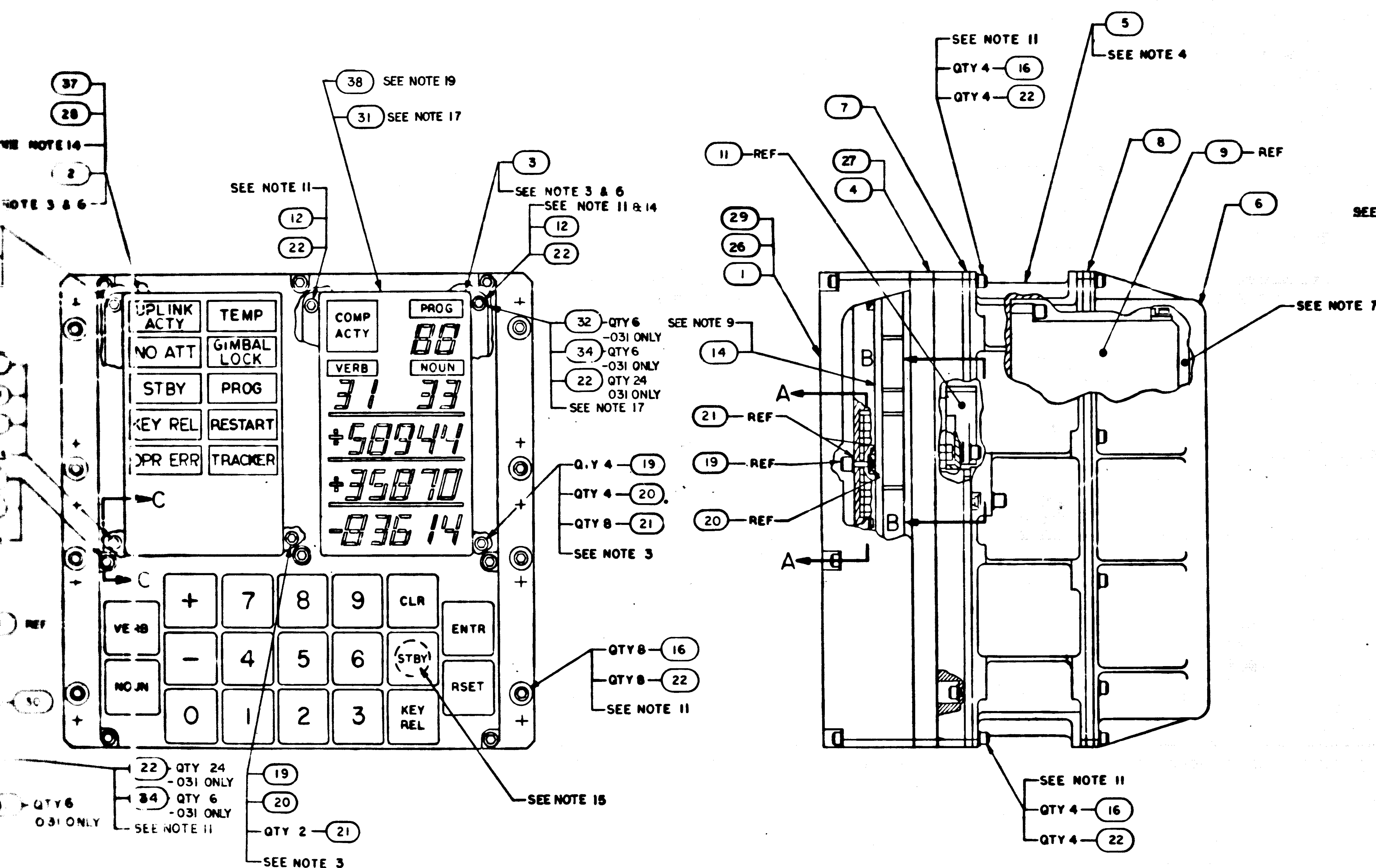
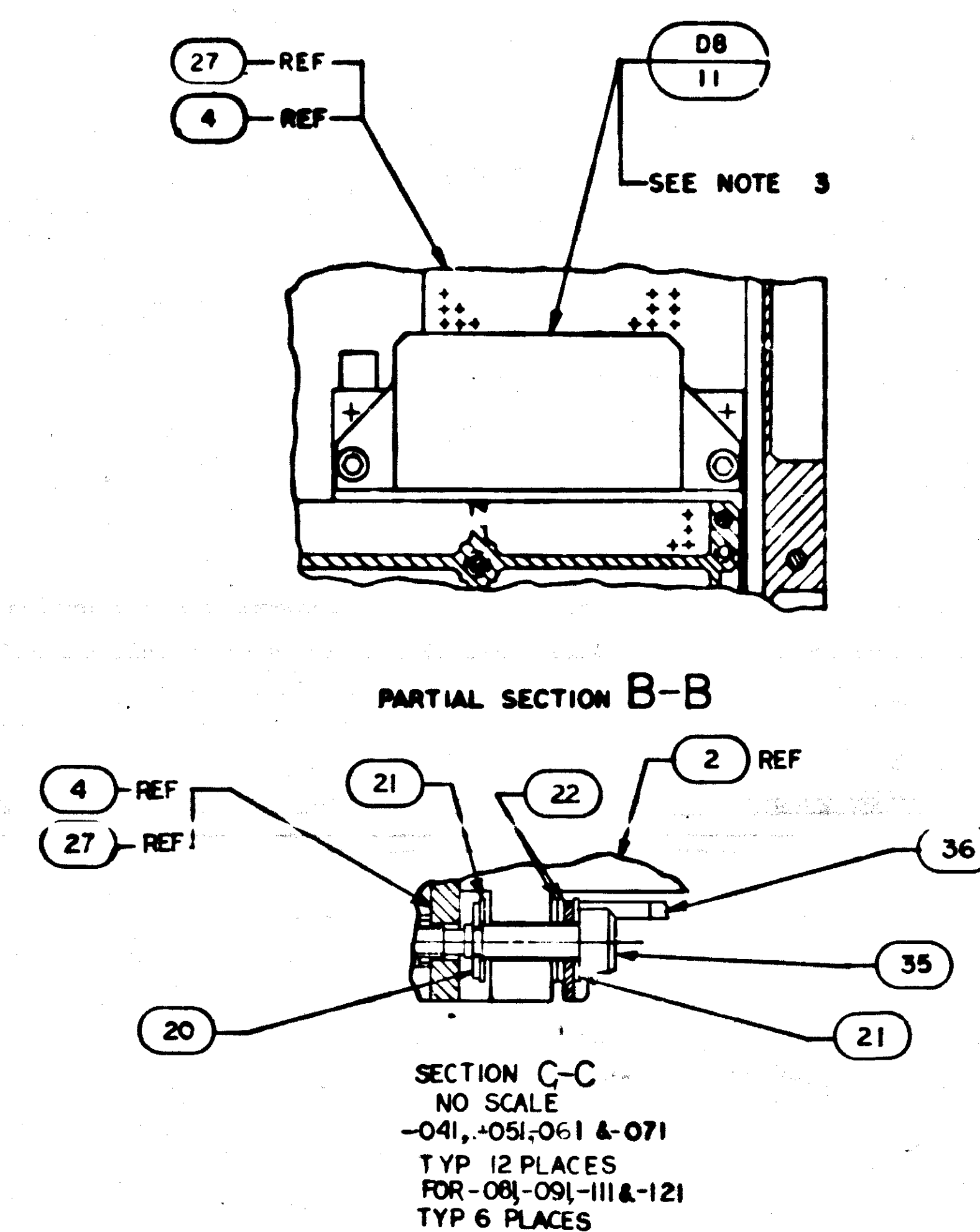
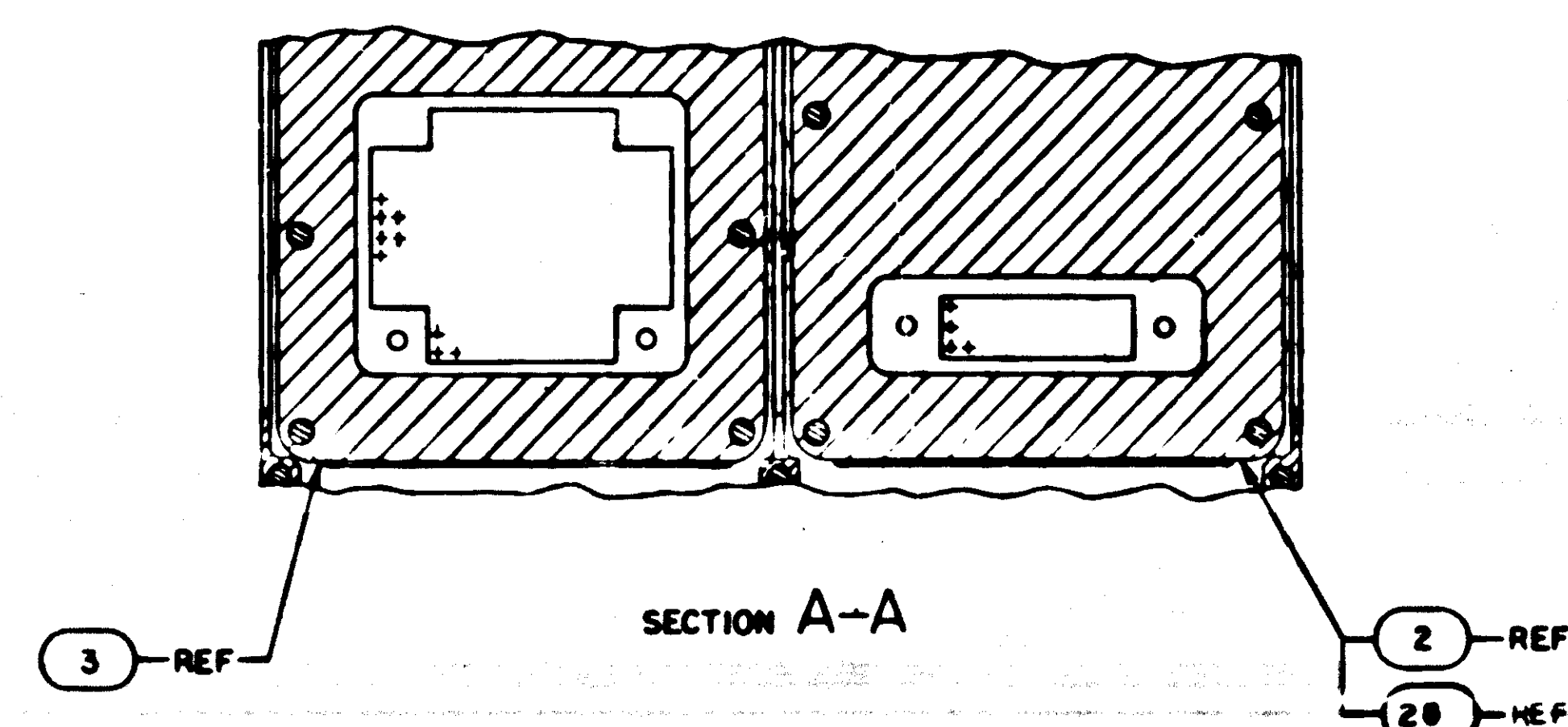
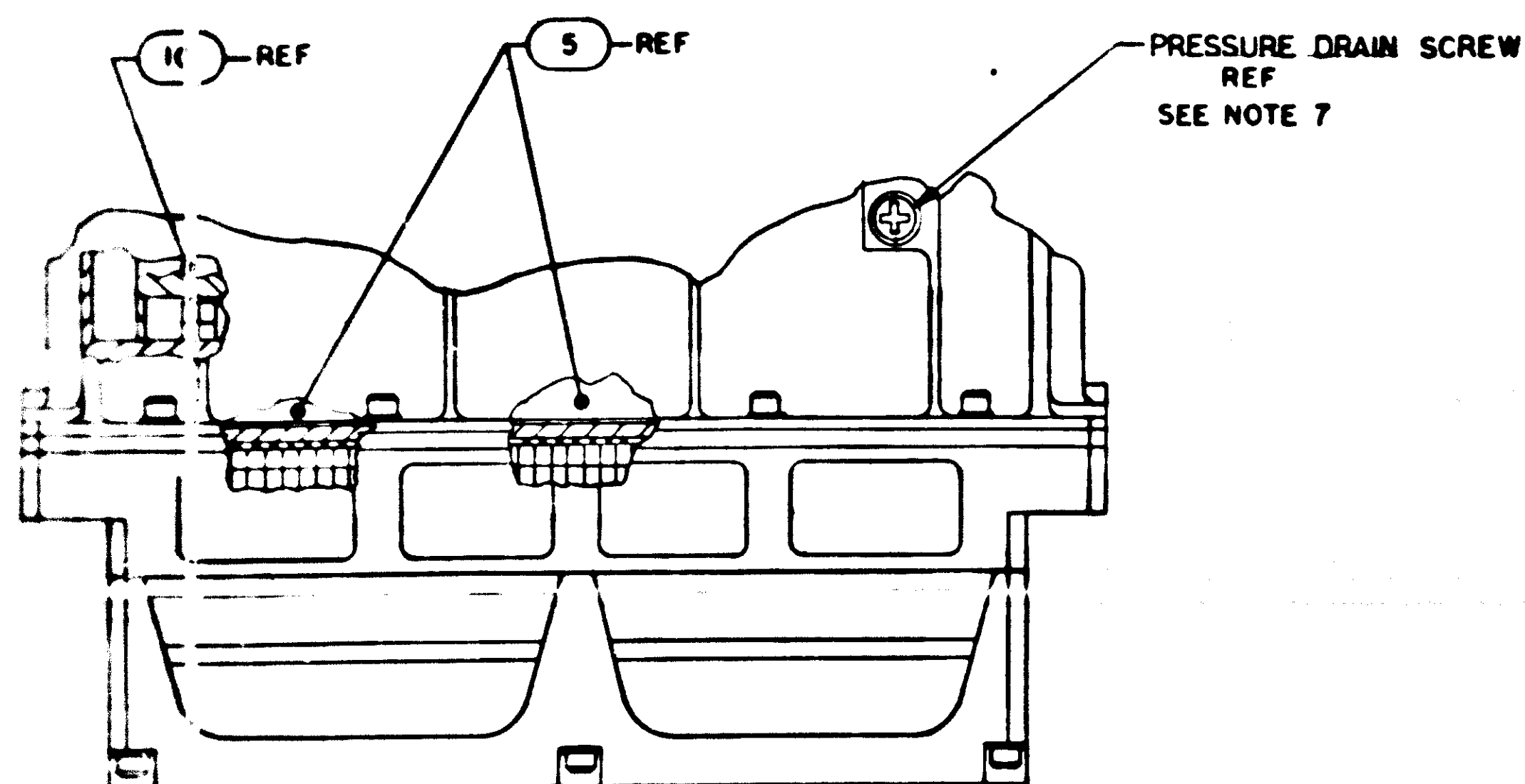
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<input checked="" type="checkbox"/>	2005918	SIGNAL FLOW DIAGRAM	REF

13	NA5620C4	WASHER, FLAT	25
	2004358	BRACKET, MODULE	24
	2004959	BRACKET, MODULE	23
46	NA5620C6	WASHER, FLAT	23
12	1004546-4	WASHER, FLAT	21
	MS16333-4014	RING, RETAINING	20
6	2004932-001	SCREW, JACKING	19
3	1004189-9	SCREW, HEX SOCKET HEAD	18
4	MS53216-1	SCREW, PAN HEAD, CROSS RECESSED	17
3	1006995-18	SCREW, HEX, SOCKET HEAD	16
1	1004260-20	NAMEPLATE	15
AR	1006879	SILICONE COMPOUND	14
13	MS16293-10	SCREW, HEX SOCKET HEAD	13
6	MS16293-10	SCREW, HEX SOCKET HEAD	13
	2003909-030	PCB BOARD MODULE ASSY D6	11
1	2003901-031	POWER SUPPLY ASSY MODULE D7	10
6	2003952-031	INDICATOR DRIVER MODULE DI-D6	9
	1006349	GASKET, BONDED, RUBBER	8
	1006350	GASKET, BONDED, RUBBER	7
	2004900	COVER, REAR	6
	2003899-011	MAIN HOUSING ASSY	5
	2003949-021	FRONT HOUSING ASSY	4
	1006315-001	INDICATOR, DIGITAL	3
	1006387-002	INDICATOR, ALARM	2
	2004929-021	COVER, FRONT	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TYPICALS ON FRACTIONS DECIMALS ANGLES DO NOT SCALE THIS DRAWING MATERIAL		CITY INSTRUMENTATION LAB CHAMBERLAIN TEX 76010		LIST OF MATERIALS MANMED SPACECRAFT CENTER HOUSTON, TEXAS			
		DRAWN <i>E. W. Jones</i> DATE <i>5/2/68</i> CHECKED <i>E. W. Jones</i> DATE <i>5/2/68</i> APPROVAL <i>E. W. Jones</i> APPROVAL <i>E. W. Jones</i>		AGC DSKY ASSEMBLY			
HEAT TREATMENT		NASA APPROVAL <i>[Signature]</i>				CODE IDENT NO 800230	SIZE J
NEXT ASSY USED ON		FINAL FINISH		SCALE 1/1		WT	THIST 1 OF 1
APPLICATION							

J	2003994
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REVIEWS			
BY	MESSAGE	DATE	APPROVAL
	INITIAL	10/13/1978	10/13
B	CHANGED PER TORR 33445 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R
C	REVISED PER TORR 35063 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R
D	REVISED PER TORR 36255 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R
F	REVISED PER TORR 36459 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R
F	REVISED PER TORR 36459 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R
G	REVISED PER TORR 36459 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R
H	REVISED PER TORR 37189 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R
J	REVISED PER TORR 37318 DR <i>10/13/78</i> CHK <i>10/13/78</i>	10/13	21R



—	—	X	X	X	X	—	—	—	—	—	2005977	SIGNAL FLOW DIAGRAM	R
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[illegible][illegible]

REF DWGS	
1. UNIVERSAL DSKY SHIPPING CONTAINER	1006422
2. DSKY CONNECTOR COVER	1006425-14
3. UNIVERSAL DSKY HANDLING FIXTURE	2014013

NOTES: 12 ASSEMBLE FIND NO.31 TO FIND NO.3 USING FIND NO.34. USE FIND NO.22,QTY 3 PER SCREW AS SHIMS BETWEEN FIND NO.31 AND FIND NO.3. USE FIND NO.22,QTY 1 PER SCREW UNDER EACH SCREW HEAD, USE FIND NO.32 ON THE THREADED PORTION OF EACH SCREW TO ACT AS A RETAINING RING DURING ASSEMBLY OF FRAME & LIGHT ONTO DSKY. CAUTION SHOULD BE EXERCISED PRIOR TO ASSEMBLY TO DSKY AS IT IS EXTREMELY DIFFICULT TO REMOVE FIND NO.3 AFTER ASSEMBLY WITHOUT JACKING HARDWARE.

13 PRIOR TO ASSEMBLY OF FIND NO.2 AND FIND NO.3 OR FIND NO.38 TO FIND NO.27 OR FIND NO.4 FILL JACKING INSULATORS OF FIND NO.27 OR FIND NO.4 WITH FIND NO.33

-071	1 THRU 12, 15, 18
-061	1 THRU 12, 15, 18
-051	1 THRU 13, 15, 18
-041	1 THRU 13, 15, 18
-031	1 THRU 5, 7, 9, 10, 11, 12, 13, 15, 16, 17, 18
-021	1 THRU 5, 7 THRU 12, 14 & 15
-011	1 THRU 13 & 15
DASH NO.	APPLICABLE NOTES
NOTE APPLICATION	

—121	1 THRU 13, 15, 18, 19, 20
—111	1 THRU 13, 15, 18, 19, 20
—091	1 THRU 12, 15, 18, 19, 20
—081	1 THRU 12, 15, 18, 19, 20
DASH NO	APPLICABLE NOTES
	NOTE APPLICATION

19. TORQUE JACKING HARDWARE FOR FIND NO.38 TO 8.5-9.5 INCH POUNDS
20. FOR FIND NO.38 USE 20C3988-01 OR 20C3988-02;

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		INSTRUMENTATION TAG CONTINUATION	
BY FRANCIS ON		ISS. ON	RECEIVED
FRACTIONS DECIMALS ANGLES		DRAWN BY <u>W. J. H. Q. 125</u>	
DO NOT SCALE THIS DRAWING		CHECKED BY <u>W. J. H. Q. 125</u>	
MATRIAL		APPROVAL	
HEAT TREATMENT		APPROVAL <u>W. J. H. Q. 125</u>	
HEAT HARDY	USED ON	NASA APPROVAL <u>W. J. H. Q. 125</u>	
POOL FURNISH		BY <u>W. J. H. Q. 125</u>	

MANNED SPACECRAFT CENTER			
HOUSTON, TEXAS			
AGC DSKY ASSEMBLY			
CODE IDENT NO	SIZE	NASA DRAWING NO	
80230	J	2003994	
SCALE 1 / 1	WT	DSHEET 1	OF 1

2003994 JF2/2

APOLLO G&N Specification
PS 2003994 Rev A
Original Issue Date: 6 JAN 67
Release Authority: TDRR 32579
Class A Release

PROCUREMENT SPECIFICATION

Record of Revisions

[illegible]

This specification consists of pages 1 to 18 inclusive.

APPROVALS	<i>[Signature]</i> NASA/MSC	2C Hall 12/8/66	Westerman 8 Dec 66 MIT/IL	28 Dec 66 10/10/66 H.G. Markowitz Chairman of RAY
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APOLLO G&N Specification
 PS 2003994 Rev. B
 Original Issue Date: 6/27/67
 Release Authority: TDRR 32579
 Class A Release

PROCUREMENT SPECIFICATION
 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
 DISPLAY AND KEYBOARD ASSEMBLY
 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
6/27/67	A	32579	Initial Release	<i>[Signature]</i>	
7/2/67	B	33947	1, 13, & 18	<i>[Signature]</i> FA	<i>[Signature]</i> FA

This specification consists of pages 1 to 18 inclusive.

APPROVALS	<i>[Signature]</i>	EC Hall	W. Starnes	<i>[Signature]</i>
	NASA/MSC	12/8/66	8 Dec 66 MIT/IL	RAY

APOLLO G&N Specification
 PS 2003994 Rev. 6
 Original Issue Date: 6/24/67
 Release Authority: TDRR 32579
 Class A Release

PROCUREMENT SPECIFICATION
 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
 DISPLAY AND KEYBOARD ASSEMBLY
 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
6/24/67	A	32579	Initial Release	<i>[Signature]</i>	
7/13/67	B	33497	1, 13, & 18	<i>[Signature]</i> FA	<i>[Signature]</i> FA
7/13/67	C	33497	1, 11, 13, 14, 15	<i>[Signature]</i> FA	<i>[Signature]</i> FA

This specification consists of pages 1 to 15 inclusive.

APPROVALS	<i>[Signature]</i>	EC Hall	W. Starnes	<i>[Signature]</i>
	NASA/MS	12/8/66	8 Dec 66 MIT/IL	RAY

APOLLO G&N Specification
 PS 2003994 Rev. 5D
 Original Issue Date: 6 Jan 67
 Release Authority: TDRR 32579
 Class A Release

PROCUREMENT SPECIFICATION
 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
 DISPLAY AND KEYBOARD ASSEMBLY
 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
4/3/67	A	32579	Initial Release	<i>[Signature]</i>	
7/2/67	B	33497	1, 13, & 18	<i>[Signature]</i> FH <i>[Signature]</i> FH	
7/27/67	C	3403	2, 11, 12, 14, 15	<i>[Signature]</i> FH <i>[Signature]</i> FH	
8/29/67	D	3403	1, 11, 12, 13, 14, 15	<i>[Signature]</i> FH <i>[Signature]</i> FH	
			Pages 2, 3, 5, 6, 10, 12		
			Retyped		

This specification consists of pages 1 to 15 inclusive.

APPROVALS	<i>[Signature]</i>	EC Hall	W. Starnes	<i>[Signature]</i>
	NASA/MSC	12/8/66	8 Dec 66 MIT/IL	RAY

APOLLO G&N Specification
 PS 2003994 Rev. E
 Original Issue Date: 6 Jan 67
 Release Authority: TDRR 32579
 Class A Release

PROCUREMENT SPECIFICATION
 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
 DISPLAY AND KEYBOARD ASSEMBLY
 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
(V) 4/24/67	A	32579	Initial Release	<i>[Signature]</i>	
(M) 7/1/67	B	33477	1, 11, & 18	<i>[Signature]</i> F4	<i>[Signature]</i> F4
(V) 7/1/67	C	33477	1, 11, 12, 13, 14, 15	<i>[Signature]</i> F4	<i>[Signature]</i> F4
(V) 8/29/67	D	33477	1, 11, 12, 13, 14, 15	<i>[Signature]</i> F4	<i>[Signature]</i> F4
			Pages 2, 3, 5, 6, 10, 12		
			Retyped		
(M) 11-16-67	E	35071	1, 2	<i>[Signature]</i> F4	<i>[Signature]</i> F4

This specification consists of pages 1 to 15 inclusive.

APPROVALS	<i>[Signature]</i>	EC Hall	W. Starnes	<i>[Signature]</i>
	NASA/MS	12/8/66	8 Dec 66	RAY
			MIT/IL	

APOLLO G&N Specification
 PS 2003994 Rev. 6
 Original Issue Date: 6 Jan 67
 Release Authority: TDRR 32579
 Class A Release

PROCUREMENT SPECIFICATION
 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
 DISPLAY AND KEYBOARD ASSEMBLY
 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
4-5-67	A	32579	Initial Release	<i>[Signature]</i>	
7-1-67	B	32577	1, 13, & 18	<i>[Signature]</i> FH	<i>[Signature]</i> FH
7-22-67	C	32575	1, 11, 12, 13, 14, 15	<i>[Signature]</i> FH	<i>[Signature]</i> FH
8-29-67	D	32575	1, 4, 7, 8, 11, 13, 14, 15	<i>[Signature]</i> FH	<i>[Signature]</i> FH
			Pages 2, 3, 5, 6, 10, 12		
			Retyped		
11-11-67	E	35071	1, 2	FH	FH
2-7-68	F	35039	1, 13	<i>[Signature]</i> FH	<i>[Signature]</i> FH

This specification consists of pages 1 to 15 inclusive.

APPROVALS	<i>[Signature]</i>	EC Hall	Weston	<i>[Signature]</i>
	NASA/MS	12/8/66	8 Dec 66	RAY

APOLLO G&N Specification
 PS 2003994 Rev G
 Original Issue Date: 6 Jan 67
 Release Authority: TDRR 32579
 Class A Release

PROCUREMENT SPECIFICATION
 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
 DISPLAY AND KEYBOARD ASSEMBLY
 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
4-5-66	A	32579	Initial Release	<i>[Signature]</i>	
7-4-66	B	33477	1, 13, & 18	<i>[Signature]</i> FH <i>[Signature]</i> FH	
7-12-66	C	34100	1, 13, 14, 15	<i>[Signature]</i> FH <i>[Signature]</i> FH	
8-29-66	D	34205	1, 4, 7, 8, 11, 13, 14, 15	<i>[Signature]</i> FH <i>[Signature]</i> FH	
			Pages 2, 3, 5, 6, 10, 12		
			Retyped		
11-16-67	E	35001	1, 2	FH	FH
2-2-68	F	35339	1, 13	<i>[Signature]</i> FH <i>[Signature]</i> FH	
3-22-68	G	35918	1, 2, 3	<i>[Signature]</i> FH <i>[Signature]</i> FH	

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APPROVALS	<i>[Signature]</i>	EC Hall	W. Starnes	<i>[Signature]</i>
	NASA/MSX	12/8/66	8 Dec 66 MIT/IL	RAY

APOLLO G&N Specification
 PS 2003994 Rev. C H
 Original Issue Date: 6 Jan 67
 Release Authority: TDRR 32579
 Class A Release

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 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
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 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
4-19-64	A	32579	Initial Release	<i>[Signature]</i>	
7-1-67	B	33497	1, 13, & 18	<i>[Signature]</i> FH	<i>[Signature]</i> FH
7-1-67	C	34125	1, 11, 12, 13, 14, 15	<i>[Signature]</i> FH	<i>[Signature]</i> FH
8-29-67	D	34765	1, 4, 7, 8, 11, 13, 14, 15	<i>[Signature]</i> FH	<i>[Signature]</i> FH
			Pages 2, 3, 5, 6, 10, 12		
			Retyped		
7-16-67	E	35071	1, 2	FH	FH
2-7-68	F	35839	1, 13	<i>[Signature]</i> FH	<i>[Signature]</i> FH
3-21-68	G	35918	1, 5, 8	<i>[Signature]</i> FH	<i>[Signature]</i> FH
4-26-68	H	36118	1, 6	<i>[Signature]</i> FH	<i>[Signature]</i> FH

This specification consists of pages 1 to 15 inclusive.

APPROVALS	<i>[Signature]</i>	EC Hall	Westamand	<i>[Signature]</i>
	NASA/MS	12/8/66	8 Dec 66	RAY

APOLLO G&N Specification
 PS 2003994 Rev G-3
 Original Issue Date: 6 Jan 67
 Release Authority: TDRR 32579
 Class A Release

PROCUREMENT SPECIFICATION
 PRODUCT CONFIGURATION AND ACCEPTANCE TEST REQUIREMENTS
 DISPLAY AND KEYBOARD ASSEMBLY
 DRAWING NO. 2003994

Record of Revisions

Date	Revision Letter	TDRR No.	Pages Revised	Approvals	
				MIT	NASA
4-1-67	A	32579	Initial Release	<i>[Signature]</i>	
7-4-67	B	33497	1, 13, & 18	<i>[Signature]</i> FH	<i>[Signature]</i> FH
7-12-67	C	34149	1, 11, 1, 1, 14, 15	<i>[Signature]</i> FH	<i>[Signature]</i> FH
8-29-67	D	34709	1, 1, 1, 1, 11, 13, 1, 15 Pages 2, 3, 5, 6, 10, 12	<i>[Signature]</i> FH	<i>[Signature]</i> FH
			Retyped		
11-11-67	E	35071	1, 2	FH	FH
2-2-68	F	35334	1, 13	<i>[Signature]</i> FH	<i>[Signature]</i> FH
2-12-68	G	35918	1, 5, 7, 8	<i>[Signature]</i> FH	<i>[Signature]</i> FH
4-16-68	H	36118	1, 6	<i>[Signature]</i> FH	<i>[Signature]</i> FH
7-11-68	J	36815	1, 2, 7, 8, 11, 13	<i>[Signature]</i> FH	<i>[Signature]</i> FH

This specification consists of pages 1 to 15 inclusive.

APPROVALS	<i>[Signature]</i>	<i>[Signature]</i> Westamand	<i>[Signature]</i> RAY
	NASA/MSC	12/8/66 8 Dec 66 MIT/IL	

1. SCOPE

1.1 This specification establishes the detail requirements for complete identification and acceptance of the Display and Keyboard Assembly Part No. 2003994-011.

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein.

2.1 Effective Issues. Unless otherwise specified herein, Military and Government Standards and specifications shall be the issue in effect on the date of request for proposal or invitation to bid.

SPECIFICATIONS

APOLLO G&N

ND 1002214

General Specification for Preservation, Packaging, Packing and Container Marking of APOLLO Guidance and Navigation Major Assemblies, Assemblies, Subassemblies, Parts and Associated Ground Support Equipment.

DRAWINGS

APOLLO G&N

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DISPLAY AND KEYBOARD ASSEMBLY

(Copies of Specifications, Standards, Drawings, Bulletins and Publications required by suppliers in connection with specific procurement functions should be obtained from the Procuring Activity or as directed by the Contracting Officer).

APOLLO G&N Specification
PS 2003994
Rev D

1. SCOPE

1.1 This specification establishes the detail requirements for complete identification and acceptance of the Display and Keyboard Assembly Part No. 2003994-011.

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein.

2.1 Effective Issues. Unless otherwise specified herein, Military and Government Standards and specifications shall be the issue in effect on the date of request for proposal or invitation to bid.

SPECIFICATIONS

APOLLO G&N

ND 1002214

General Specification for Preservation, Packaging, Packing and Container Marking of APOLLO Guidance and Navigation Major Assemblies, Assemblies, Subassemblies, Parts and Associated Ground Support Equipment.

DRAWINGS

APOLLO G&N

2003994

DISPLAY AND KEYBOARD ASSEMBLY

(Copies of Specifications, Standards, Drawings, Bulletins and Publications required by suppliers in connection with specific procurement functions should be obtained from the Procuring Activity or as directed by the Contracting Officer).

APOLLO G&N Specification
PS 2003994
Rev J

1. SCOPE

1.1 This specification establishes the detail requirements for complete identification and acceptance of the Display and Keyboard Assembly Part No. 2003994.

2. APPLICABLE DOCUMENTS

The following documents form a part of this specification to the extent specified herein.

2.1 Effective Issues. Unless otherwise specified herein, Military and Government Standards and specifications shall be the issue in effect on the date of request for proposal or invitation to bid.

SPECIFICATIONS

APOLLO G&N

MD 1002214

General Specification for Preservation, Packaging, Packing and Container Marking of APOLLO Guidance and Navigation Major Assemblies, Assemblies, Subassemblies, Parts and Associated Ground Support Equipment.

DRAWINGS

APOLLO G&N

2003994

DISPLAY AND KEYBOARD ASSEMBLY

(Copies of Specifications, Standards, Drawings, Bulletins and Publications required by suppliers in connection with specific procurement functions should be obtained from the Procuring Activity or as directed by the Contracting Officer).

2.2 Conflicting Requirements. In the event of conflict between the requirements of the contract, this Specification and the documents listed in this section, the following order of precedence shall apply and the contractor shall notify MIT Apollo Management of the conflict as soon as it is determined.

- a. The contract
- b. This Specification
- c. Documents listed in this section

3. REQUIREMENTS

3.1 PERFORMANCE. The Display and Keyboard Assembly has the capability to store, display, and transfer binary information as required by the Apollo Guidance Computer. The assembly is comprised of a Keyboard Module, Power Supply Module and six Indicator Driver Modules.

3.1.1 Continuity. The resistance between pin 39 of J9 and chassis shall be 0.5 ohms maximum.

3.1.2 Insulation Resistance. The insulation resistance between pin 39 of J9, and all other pins connected together shall be 100 megohms minimum.

3.1.3 Input Requirements. The assembly shall perform as specified herein when supplied with the following inputs:

3.1.3.1 Pins 8 and 39 of J9 shall be connected to ground (0 VDC).

3.1.3.2 DC Voltage. The following DC voltage shall be applied to the assembly:

- a. 14.0 ± 0.1 VDC
- b. 28.0 ± 0.1 VDC
- c. 5.0 ± 0.1 VDC

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3.1.3.3 AC Voltage. The AC voltage supplied to the assembly shall be 75 VRMS at 400 ± 8 cps single phase controlled to an accuracy of $\pm 2\%$, be variable up to 115 ± 5 VRMS, and be capable of being turned OFF.

3.1.3.4 Input Sync Pulse. The input sync pulse supplied to the assembly shall be generated from a source having the following characteristics:

- a. High Level 680K ohms \pm 5% to ground (0 VDC)
- b. Low Level 2K ohms \pm 5% returned to not more than 0.5V
- c. Frequency 800 \pm 16 cps

3.1.4 Legend Illumination. With a 10K ohm potentiometer, connected between pins 4 and 5 of J9, varied from minimum to maximum resistance the brightness of the legends (Noun, Verb, Program, and the horizontal bars above each register) shall vary from OFF to 10-18 Foot-Lamberts.

3.1.5 Keyboard Illumination. With the 115 VRMS supply set to 115 ± 5 VRMS for one minute and then reduced to 75.0 ± 1.5 VRMS, the Keyboard keys shall be illuminated at 0.5 ± 0.3 Foot-Lamberts.

3.1.6 Keyboard Outputs. With each Keyboard key depressed individually, the outputs monitored at the output pins listed in Table 3-1 shall be logic "ones" and "zeros" as indicated in Table 3-1.

3.1.6.1 Logic One. A logic one shall be the equivalent of the 28 VDC supply applied thru a 1.0K ohm series resistance and a series diode.

3.1.6.2 Logic Zero. A logic zero shall be equivalent to an open circuit (no output).

3.1.7 Incandescent Indicators. To insure that the incandescent indicators and their associated latching relays are OFF, a logic input as specified below shall be applied to the pins of J9 as listed below:

[illegible]

3.1.7.1 Logic One. A logic one shall be generated from a source of 4K ohms \pm 5% returned to not more than 0.4 Volts for 15.0 \pm 0.1 msec. -1.5

3.1.7.2 Logic Zero. A logic zero shall be generated from a source of 680K ohms \pm 5% to ground (0 VDC).

3.1.8 Flashing Alarm Characters. With the flashing timing pulse applied to pins 46 and 72 of J9, the alarm indicators KEY REL and OPR ERR shall flash.

3.1.8.1 Flasher Timing Pulse. The Flasher Timing Pulse applied to the assembly shall be generated from a source having the following characteristics:

- | | |
|---------------|---|
| a. High Level | 680K ohms \pm 5% to ground (0 VDC) |
| b. Low Level | 4K ohms \pm 5% returned to not more than 0.4V |
| c. Frequency | 1.5 \pm 0.3 cps |
| d. Duty Cycle | approximately 50% (for reference only) |

3.1.9 Flashing Noun Characters. With the Flasher Timing Pulse specified in paragraph 3.1.8.1 applied to pin 70 of J9 and the Noun numerical characters programmed for 8's (ref. Tables 3-4 and 3-5), the numerical characters shall flash.

3.1.10 Flashing Verb Characters. With the Flasher Timing Pulse specified in paragraph 3.1.8.1 applied to pin 70 of J9 and the Verb numerical characters programmed for 8's (ref. Tables 3-4 and 3-5), the numerical characters shall flash.

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3.1.7.1 Logic One. A logic one shall be generated from a source of 4K ohms \pm 5% returned to not more than 0.4 Volts for 15.0 \pm 0 -1.5 msec.

3.1.7.2 Logic Zero. A logic zero shall be generated from a source of 680K ohms \pm 5% to ground (0 VDC).

3.1.8 Flashing Alarm Characters. With the flashing timing pulse applied to pins 46 and 72 of J9, the alarm indicators KEY REL and OPR ERR shall flash.

3.1.8.1 Flasher Timing Pulse. The Flasher Timing Pulse applied to the assembly shall be generated from a source having the following characteristics:

- | | |
|---------------|---|
| a. High Level | 680K ohms \pm 5% to ground (0 VDC) |
| b. Low Level | 4K ohms \pm 5% returned to not more than 0.4V |
| c. Frequency | 1.5 \pm 0.3 cps |
| d. Duty Cycle | approximately 50% (for reference only) |

3.1.9 Flashing Noun Characters. With the Flasher Timing Pulse specified in paragraph 3.1.8.1 applied to pin 70 of J9 and the Noun numerical characters programmed for 8's (ref. Tables 3-4 and 3-5), the numerical characters shall flash.

3.1.10 Flashing Verb Characters. With the Flasher Timing Pulse specified in paragraph 3.1.8.1 applied to pin 70 of J9 and the Verb numerical characters programmed for 8's (ref. Tables 3-4 and 3-5), the numerical characters shall flash.

TABLE 3-1

KEY DEPRESSED	OUTPUT PINS							
	79	76	77	78	51	49	48	28
KEY REL	1	1	0	0	1	0	0	0
VERB	1	0	0	0	1	0	0	0
NOUN	1	1	1	1	1	0	0	0
ENTR	1	1	1	0	0	0	0	0
CLR	1	1	1	1	0	0	0	0
+	1	1	0	1	0	0	0	0
-	1	1	0	1	1	0	0	0
0	1	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0
2	0	0	0	1	0	0	0	0
3	0	0	0	1	1	0	0	0
4	0	0	1	0	0	0	0	0
5	0	0	1	0	1	0	0	0
6	0	0	1	1	0	0	0	0
7	0	0	1	1	1	0	0	0
8	0	1	0	0	0	0	0	0
9	0	1	0	0	1	0	0	0
RSET	1	0	0	1	0	0	1	0
STBY	0	0	0	0	0	1	0	1

NOTE: The figures one and zero used in Table 3-1 represent the logic "one" and "zero" levels specified in paragraphs 3.1.6.1 and 3.1.6.2.

TABLE 3-1

KEY DEPRESSED	OUTPUT PINS							
	79	76	77	78	51	49	48	28
KEY REL	1	1	0	0	1	0	0	0
VERB	1	0	0	0	1	0	0	0
NOUN	1	1	1	1	1	0	0	0
ENTR	1	1	1	0	0	0	0	0
CLR	1	1	1	1	0	0	0	0
+	1	1	0	1	0	0	0	0
-	1	1	0	1	1	0	0	0
0	1	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0
2	0	0	0	1	0	0	0	0
3	0	0	0	1	1	0	0	0
4	0	0	1	0	0	0	0	0
5	0	0	1	0	1	0	0	0
6	0	0	1	1	0	0	0	0
7	0	0	1	1	1	0	0	0
8	C	1	0	0	0	0	0	0
9	0	1	0	0	1	0	0	0
RSET	1	0	0	1	0	0	1	0
STBY	0	0	0	0	0	1	0	1

NOTE: The figures one and zero used in Table 3-1 represent the logic "one" and "zero" levels specified in paragraphs 3.1.6.1 and 3.1.6.2.

3.1.11 Status and Caution Indicators. With a logic "one" applied to an input pin of J9 as specified in Table 3-2 and the input voltage set to 5.0 ± 0.1 VDC the corresponding status or caution indicator shall be illuminated at 15 ± 3 Foot-Lamberts. The exception shall be the COMP ACTY indicator, which shall be illuminated at 10 -18 Foot-Lamberts with the 10K ohm potentiometer (ref. paragraph 3.1.4) set to maximum resistance. Also a contact closure shall exist between pins of J9 as specified in Table 3-2.

TABLE 3-2

Logic Input	J9 Input Pin	Indicator Illuminated.	Indicator Color (reference only)	Contact Closure Between pins of J9
1	47	UPLINK ACTY	White	
1	25	STBY	White	58 and 35
1	71	TEMP	Yellow	57 and 31
1	44	RESTART	Yellow	57 and 31
1	26	COMP ACTY	Green*	
1	69			37 and 61
1	46	KEY REL	White	
1	18			36 and 60
1	45			55 and 84
1	45			15 and 32
1	27			80 and 81
1	27			57 and 83
1	66			33 and 56
1	72	OPR ERR	White	
0	66			16 and 56
0	44			31 and 53
0	18			36 and 85
0	45			57 and 84
0	45			14 and 32
0	69			19 and 37
0	27			54 and 83
0	27			82 and 81
0	25			59 and 35

*Electroluminescent indicator.

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3.1.11 Status and Caution Indicators. With a logic "one" applied to an input pin of J9 as specified in Table 3-2 and the input voltage set to 5.0 ± 0.1 VDC the corresponding status or caution indicator shall be illuminated. The average intensity of the incandescent display shall be 15 ± 3 Foot-Lamberts. The exception shall be the COMP ACTY indicator, which shall be illuminated at an average intensity of 10-24 Foot-Lamberts with the 10K ohm potentiometer (ref. paragraph 3.1.4) set to maximum resistance. Also a contact closure shall exist between pins of J9 as specified in Table 3-2.

TABLE 3-2

Logic Input	J9 Input Pin	Indicator Illuminated	Indicator Color (reference only)	Contact Closure Between pins of J9
1	47	UPLINK ACTY	White	
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1	44	RESTART	Yellow	57 and 31
1	26	COMP ACTY	Green*	
1	69			37 and 61
1	46	KEY REL	White	
1	18			36 and 60
1	45			55 and 84
1	45			15 and 32
1	27			80 and 81
1	27			57 and 83
1	66			33 and 56
1	72	OPR ERR	White	
0	66			16 and 56
0	44			31 and 53
0	18			36 and 85
0	45			57 and 84
0	45			14 and 32
0	69			19 and 37
0	27			54 and 83
0	27			82 and 81
0	25			59 and 35

*Electroluminescent indicator.

APOLLO G&N Specification
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3.1.11 Status and Caution Indicators. With a logic "one" applied to an input pin of J9 as specified in Table 3-2 and the input voltage set to 5.0 ± 0.1 VDC the corresponding status or caution indicator shall be illuminated. The average intensity of the incandescent display shall be 15 ± 3 Foot-Lamberts. The exception shall be the COMP ACTY indicator, which shall be illuminated at an average intensity of 10-24 Foot-Lamberts with the 10K ohm potentiometer (ref. paragraph 3.1.4) set to maximum resistance. Also a contact closure shall exist between pins of J9 as specified in Table 3-2.

TABLE 3-2

Logic Input	J9 Input Pin	Indicator Illuminated	Indicator Color (reference only)	Contact Closure Between pins of J9
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1	26	COMP ACTY	Green*	
1	69			37 and 61
1	46	KEY REL	White	
1	18			36 and 60
1	45			55 and 84
1	45			15 and 32
1	27			80 and 81
1	27			57 and 83
1	66			33 and 56
1	72	OPR ERR	White	
0	66			16 and 56
0	44			31 and 53
0	18			36 and 85
0	45			57 and 84
0	45			14 and 32
0	69			19 and 37
0	27			54 and 83
0	27			82 and 81
0	25			59 and 35

*Electroluminescent indicator.

APOLLO GEN Specification
PS 2003994
Rev J

3.1.11 Status and Caution Indicators. With a logic "one" applied to an input pin of J9 as specified in Table 3-2 and the input voltage set to 5.0 ± 0.1 VDC the corresponding status or caution indicator shall be illuminated. The current shall be monitored for each indicator. White shall be $225 \text{ ma} \pm 20\%$, yellow shall be $180 \text{ ma} \pm 20\%$. The intensity limit for the Status (white) indicators shall be 8-28 foot-lamberts and the maximum legend intensity shall not exceed the minimum by more than a ratio of 2:1 in a given panel. The intensity for the Caution (yellow) indicators shall be 8-28 foot-lamberts and the maximum legend intensity shall not exceed the minimum by more than a ratio of 2:1 in a given panel. The exception shall be the COMP ACTY Indicator, which shall be illuminated at an average intensity of 10-24 foot-lamberts with the 10K ohm potentiometer (ref. Para. 3.1.4) set to maximum resistance. Also a contact closure shall exist between pins of J9 as specified in Table 3-2.

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1	44	RESTART	Yellow	57 and 31
1	26	COMP ACTY	Green*	
1	69			37 and 61
1	46	KEY REL	White	
1	18			36 and 60
1	45			55 and 84
1	45			15 and 32
1	27			80 and 81
1	27			57 and 83
1	66			33 and 56
1	72	OPR ERR	White	
0	66			16 and 56
0	44			31 and 53
0	18			36 and 85
0	45			57 and 84
0	45			14 and 32
0	69			19 and 37
0	27			54 and 83
0	27			82 and 81
0	25			59 and 35

*Electroluminescent indicator.

3.1.11.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 as specified in Table 3-2, contact closure shall exist between pins of J9 as specified in Table 3-2.

3.1.11.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2.

3.1.12 Isolated Relay Indicators. When programmed for RLYWD 12, and a logic "one" applied to an input pin of J9 as specified in Table 3-3, the corresponding isolated relay indicator shall be illuminated at 15 ± 3 Foot-Lamberts. Also contact closure shall exist between pins of J9 as specified in Table 3-3.

3.1.12.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 specified in Table 3-3, a contact closure shall exist between pins of J9 as specified in Table 3-3.

TABLE 3-3

Logic Input	J9 Input Pin	Indicator Illuminated	Contact Closure Between Pins
1	41	NO ATT	
1	3	GIMBAL LOCK	57 and 31
1	10		17 and 34
1	23	TRACKER	57 and 31
1	42	PROG	57 and 31
0	10		6 and 34

3.1.12.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2.

3.1.12.3 RLYWD 12 Input. The RLYWD 12 input shall be applied at the same time the indicator input pins receive a logic input signal. RLYWD 12 shall be a combination of logic "ones" and "zeros" (ref. section 3.1.13.2) applied to the pins of J9 as listed below:

Pins of J9	68	43	24	11
Logic Input	1	1	0	0

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3.1.11.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 as specified in Table 3-2, contact closure shall exist between pins of J9 as specified in Table 3-2.

3.1.11.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2

3.1.12 Isolated Relay Indicators. When programmed for RLYWD 12, and a logic "one" applied to an input pin of J9 as specified in Table 3-3, the corresponding isolated relay indicator shall be illuminated. The average intensity of the incandescent display shall be 15 ± 3 Foot-Lamberts. Also contact closure shall exist between pins of J9 as specified in Table 3-3.

3.1.12.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 specified in Table 3-3, a contact closure shall exist between pins of J9 as specified in Table 3-3.

TABLE 3-3

Logic Input	J9 Input Pin	Indicator Illuminated	Contact Closure Between Pins
1	41	NO ATT	
1	3	GIMBAL LOCK	57 and 31
1	10		17 and 34
1	23	TRACKER	57 and 31
1	42	PROG	57 and 31
0	10		6 and 34

3.1.12.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2.

3.1.12.3 RLYWD 12 Input. The RLYWD 12 input shall be applied at the same time the indicator input pins receive a logic input signal. RLYWD 12 shall be a combination of logic "ones" and "zeros" (ref. section 3.1.13.2) applied to the pins of J9 as listed below:

Pins of J9	68	43	24	11
Logic Input	1	1	0	0

3.1.11.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 as specified in Table 3-2, contact closure shall exist between pins of J9 as specified in Table 3-2.

3.1.11.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2

3.1.12 Isolated Relay Indicators. When programmed for RLYWD 12, and a logic "one" applied to an input pin of J9 as specified in Table 3-3, the corresponding isolated relay indicator shall be illuminated. The average intensity of the incandescent display shall be 15 \pm 4 ~~Foot-Lamberts~~. Also contact closure shall exist between pins of J9 as specified in Table 3-3.

3.1.12.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 specified in Table 3-3, a contact closure shall exist between pins of J9 as specified in Table 3-3.

TABLE 3-3

Logic Input	J9 Input Pin	Indicator Illuminated	Contact Closure Between Pins
1	41	NO ATT	
1	3	GIMBAL LOCK	57 and 31
1	10		17 and 34
1	23	TRACKER	57 and 31
1	42	PROG	57 and 31
0	10		6 and 34

3.1.12.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2.

3.1.12.3 RLYWD 12 Input. The RLYWD 12 input shall be applied at the same time the indicator input pins receive a logic input signal. RLYWD 12 shall be a combination of logic "ones" and "zeros" (ref. section 3.1.13.2) applied to the pins of J9 as listed below:

Pins of J9	68	43	24	11
Logic Input	1	1	0	0

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3.1.11.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 as specified in Table 3-2, contact closure shall exist between pins of J9 as specified in Table 3-2.

3.1.11.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2.

3.1.12 Isolated Relay Indicators. When programmed for RLYWD 12, and a logic "one" applied to an input pin of J9 as specified in Table 3-3, the corresponding isolated relay indicator shall be illuminated. The intensity of the Status/Caution Legends and Current measurements shall be as specified in Paragraph 3.1.11. Also contact closure shall exist between pins of J9 as specified in Table 3-3.

3.1.12.1 Logic Zero Input. With a logic "zero" applied to an input pin of J9 specified in Table 3-3, a contact closure shall exist between pins of J9 as specified in Table 3-3.

TABLE 3-3

Logic Input	J9 Input Pin	Indicator Illuminated	Contact Closure Between Pins
1	41	NO ATT	
1	3	GIMBAL LOCK	57 and 31
1	10		17 and 34
1	23	TRACKER	57 and 31
1	42	PROG	57 and 31
0	10		6 and 34

3.1.12.2 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in sections 3.1.7.1 and 3.1.7.2.

3.1.12.3 RLYWD 12 Input. The RLYWD 12 input shall be applied at the same time the indicator input pins receive a logic input signal. RLYWD 12 shall be a combination of logic "ones" and "zeros" (ref. section 3.1.13.2) applied to the pins of J9 as listed below:

Pins of J9	68	43	24	11
Logic Input	1	1	0	0

3.1.13 Numerical Electroluminescent Indicators. With the 10K potentiometer (ref. paragraph 3.1.4) set to maximum resistance, and the appropriate RLYWD and RLYBT combinations of logic "ones" and "zeros" applied as specified in Tables 3-4 and 3-5, the corresponding Noun, Verb, and Program legend numerical characters and the numerical characters of all registers shall be illuminated at 10-18 Foot-Lamberts.

TABLE 3-4

RLYWD				RLYBT										
Word Bits				Sign Bit	Character 2 Bits					Character 1 Bits				
16	14	13	12	11	10	9	8	7	6	5	4	3	2	1
DSKY INPUT PINS														
68	43	24	11	12	67	42	23	10	3	66	41	22	9	2
1	0	1	1		← PROGRAM CHAR 2 →					← PROGRAM CHAR 1 →				
1	0	1	0		← VERB CHAR 2 →					← VERB CHAR 1 →				
1	0	0	1		← NOUN CHAR 2 →					← NOUN CHAR 1 →				
1	0	0	0							← REG 1 CHAR 5 →				
0	1	1	1	R1(+)	← REG 1 CHAR 4 →					← REG 1 CHAR 3 →				
0	1	1	0	R1(-)	← REG 1 CHAR 2 →					← REG 1 CHAR 1 →				
0	1	0	1	R2(+)	← REG 2 CHAR 5 →					← REG 2 CHAR 4 →				
0	1	0	0	R2(-)	← REG 2 CHAR 3 →					← REG 2 CHAR 2 →				
0	0	1	1		← REG 2 CHAR 1 →					← REG 3 CHAR 5 →				
0	0	1	0	R3(+)	← REG 3 CHAR 4 →					← REG 3 CHAR 3 →				
0	0	0	1	R3(-)	← REG 3 CHAR 2 →					← REG 3 CHAR 1 →				

3.1.13.1 With the numerical electroluminescent characters programmed for 8's (ref. Tables 3-4 and 3-5) and the 10K ohm potentiometer set to minimum resistance all numerical electroluminescent indicators shall be OFF.

TABLE 3-5

Numerical Displays	Character Bits				
	10 or 5	9 or 4	8 or 3	7 or 2	6 or 1
Blank	0	0	0	0	0
0	1	0	1	0	1
1	0	0	0	1	1
2	1	1	0	0	1
3	1	1	0	1	1
4	0	1	1	1	1
5	1	1	1	1	0
6	1	1	1	0	0
7	1	0	0	1	1
8	1	1	1	0	1
9	1	1	1	1	1

3.1.13.2 For clarification, an example in the use of Tables 3-4 and 3-5 is given below:

EXAMPLE:

Problem: Program the numeral 1 into Character 2 of the Program legend.

Explanation: The appropriate RLYWD and its input pins Character 2 input pins are obtained from Table 3-4. The numerical logic input is obtained from Table 3-5. The input pins and logic input are as follows:

RLYWD				RLYBT				
Word Bits				Character Bits				
16	14	13	12	10	9	8	7	6
J9 Input Pins								
68	43	23	11	67	42	23	10	3
Logic Input								
1	0	1	1	0	0	0	1	1

3.1.13.3 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in paragraphs 3.1.7.1 and 3.1.7.2.

3.1.14 Thermal Cycle Extremes and Marginal Voltages:

3.1.14.1 Thermal Cycle. The assembly shall be subjected to the thermal cycle specified below. Dynamic tests shall be performed during the last two thermal extremes as specified in paragraphs 3.1.14.2 thru 3.1.14.4.

- a. Set ambient temperature to $0^{\circ}\text{C} +0^{\circ}\text{C}$ for 8 ± 1 hours.
 -2.8°C
- b. Increase the ambient temperature to $65^{\circ}\text{C} +2.8^{\circ}\text{C}$ in not less than 40 minutes. This temperature shall be maintained for 3 hours.
 -0°C
- c. Decrease the ambient temperature to $0^{\circ}\text{C} +0^{\circ}\text{C}$ in not less than 40 minutes. This temperature shall be maintained for 1.5 hours.
 -2.8°C
- d. Increase the ambient temperature to $65^{\circ}\text{C} +2.8^{\circ}\text{C}$ in not less than 40 minutes. This temperature shall be maintained for 1.5 hours.
 -0°C
- e. Decrease the ambient temperature to $0^{\circ}\text{C} +0^{\circ}\text{C}$ in not less than 40 minutes. This temperature shall be maintained for 1.5 hours.
 -2.8°C
- f. Increase the ambient temperature to $65^{\circ}\text{C} +2.8^{\circ}\text{C}$ in not less than 40 minutes. This temperature shall be maintained for 1.5 hours.
 -0°C

3.1.14.2 Low Marginal Voltages/Low Temperature. The assembly shall perform as specified in paragraphs 3.1.4 and 3.1.6 thru 3.1.13 when the 28.0V supply is set to 20.0 ± 0.1 VDC, and the 14V supply is set to 12.2 ± 0.1 VDC, while the ambient temperature is maintained at $0^{\circ}\text{C} +0^{\circ}\text{C}$
 -2.8°C .

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3.1.13.3 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in paragraphs 3.1.7.1 and 3.1.7.2.

3.2 PRODUCT CONFIGURATION

3.2.1 Drawings. The configuration of the assembly shall be in accordance with Apollo G&N Drawing 2003994 and all drawings and engineering data referenced thereon.

4. QUALITY ASSURANCE PROVISIONS

4.1 GENERAL. The contractor responsible for the manufacture of the assembly shall be responsible for the accomplishment of each test required herein. See Table 4-1, Product Performance and Configuration Requirement/Quality Verification Cross Reference Index.

TABLE 4-1

Requirement	Verification	Requirement	Verification
3.1.1	4.2.2	3.1.11	4.2.14
3.1.2	4.2.3	3.1.11.1	4.2.14.1
3.1.3.2	4.2.4.1	3.1.12	4.2.15
3.1.3.2	4.2.4.2	3.1.12.1	4.2.15.1
3.1.3.2	4.2.4.3	3.1.13	4.2.16
3.1.3.3	4.2.5	3.1.13.1	4.2.16.1
3.1.3.4	4.2.4.4		
3.1.4	4.2.7		
3.1.5	4.2.8		
3.1.6	4.2.9		
3.1.7	4.2.10		
3.1.8	4.2.11		
3.1.9	4.2.12		
3.1.10	4.2.13		

3.1.13.3 Logic One and Zero. The logic "ones" and "zeros" referenced in this section shall be as specified in paragraphs 3.1.7.1 and 3.1.7.2.

3.2 PRODUCT CONFIGURATION

3.2.1 Drawings. The configuration of the assembly shall be in accordance with Apollo G&N Drawing 2003994 and all drawings and engineering data referenced thereon.

4. QUALITY ASSURANCE PROVISIONS

4.1 GENERAL. The contractor responsible for the manufacture of the assembly shall be responsible for the accomplishment of each test required herein. See Table 4-1, Product Performance and Configuration Requirement/Quality Verification Cross Reference Index.

TABLE 4-1

Requirement	Verification	Requirement	Verification
3.1.1	4.2.2	3.1.11	4.2.14,4.2.6, 4.2.4.3
3.1.2	4.2.3	3.1.11.1	4.2.14.1
3.1.3.2	4.2.4.1	3.1.12	4.2.15,4.2.6, 4.2.4.3
3.1.3.2	4.2.4.2	3.1.12.1	4.2.15.1
3.1.3.2	4.2.4.3	3.1.13	4.2.16,4.2.6
3.1.3.3	4.2.5	3.1.13.1	4.2.16.1
3.1.3.4	4.2.4.4		
3.1.4	4.2.7,4.2.6		
3.1.5	4.2.8,4.2.6		
3.1.6	4.2.9		
3.1.7	4.2.10		
3.1.8	4.2.11		
3.1.9	4.2.12		
3.1.10	4.2.13		

3.1.14.3 Low Marginal Voltages/High Temperature. The assembly shall perform as specified in paragraphs 3.1.4 and 3.1.6 thru 3.1.13 when the 28V supply is set to 20.0 ± 0.1 VDC, and the 14V supply is set to 12.2 ± 0.1 VDC, while the ambient temperature is maintained at $65^\circ\text{C} +2.8^\circ\text{C}$ to -0°C .

3.1.14.4 High Marginal Voltages/High Temperature. The assembly shall perform as specified in paragraphs 3.1.4 and 3.1.6 thru 3.1.13 when the 28.0V supply is set to 32.0 ± 0.1 VDC, and the 14V supply is set to 10.0 ± 0.1 VDC, while the ambient temperature is maintained at $65^\circ\text{C} +2.8^\circ\text{C}$ to -0°C .

During marginal voltage and thermal extremes, no light intensity limits shall apply. Visual indication will insure system operation. The Keyboard shall not be energized at high thermal limits.

3.1.15 Vibration. The assembly shall perform as specified in paragraph 3.1.4 thru 3.1.13 after being subjected to the vibration limits specified below:

- | | |
|-------------------------|---|
| a. Frequency Range | 10 to 2000 to 10 cps |
| b. Frequency Sweep Rate | at a logarithmic rate of one minute per octave |
| c. Velocity | $1.83 \pm 10\%$ inches per second in the frequency range of 10 to 100 cps |
| d. Acceleration | 3 g's $\pm 10\%$ peak in the frequency range of 100 to 2000 cps |
| e. Planes | each of the three mutually perpendicular axes. |

3.1.15.1 Switch Chatter. During vibration there shall be no evidence of Keyboard switch chatter as specified below:

Key Lines - No contact closures of more than 50 usec duration.

Key Reset - No contact opens of more than 50 usec duration.

4.1.1 Test Conditions

4.1.1.1 Environmental. The assembly shall be tested under the following ambient conditions:

- a. Temperature: $25^{\circ} \pm 10^{\circ}\text{C}$
- b. Relative Humidity: 90% max
- c. Barometric Pressure: 28 to 32 inches of Hg

4.1.1.2 Assembly Case Ground. The dynamic tests specified in paragraphs 4.2.6 and 4.2.16 shall be conducted with pins 8 and 39 of J9 connected to ground (0 VDC).

4.1.2 Nonconforming Units. Failure of the unit to pass any examination or test of this specification shall automatically classify the unit as nonconforming. Each nonconforming unit corrected by the contractor shall be reinspected. Reinspection may be limited to the test or examination which defined the nonconformance, or, when directed by the cognizant inspector, a complete retest and re-examination may be required. Nonconforming units which have not been corrected will be considered for acceptance only upon formal application by the contractor to the cognizant NASA representative.

4.2 TESTS

4.2.1 Drawing Compliance. The assembly shall be visually examined for compliance to the requirements of APOLLO G&N Drawing 2003994. Particular attention shall be given to inspection for damage to surfaces, structure, and equipment, including contaminants, pin misalignment, and legibility and appearance of marking.

4.2.2 Continuity. Verify that the resistance between pin 39 of J9 and the assembly housing is in accordance with paragraph 3.1.1.

4.2.3 Insulation Resistance. Remove all lights and modules except Keyboard from assembly. Using test equipment with a test potential of 50 VDC limited to a short circuit current of 50 microamperes, measure the resistance between pin 39 of J9 and all other pins of J9 connected together. Verify that the resistance complies with that specified in paragraph 3.1.2.

3.1.16 Leak Rate. With the assembly pressurized to 2 psig at 70°F using a mixture of 90% nitrogen and 10% helium, the leak rate shall not exceed 1.0×10^{-4} cc/atm/sec.

3.2 PRODUCT CONFIGURATION

3.2.1 Drawings. The configuration of the assembly shall be in accordance with Apollo G&N Drawing 2003994 and all drawings and engineering data referenced thereon.

3.2.2 Weight. The assembly shall weigh not more than 17.5 pounds.

4. QUALITY ASSURANCE PROVISIONS

4.1 GENERAL. The contractor responsible for the manufacture of the assembly shall be responsible for the accomplishment of each test required herein. See Table 4-1, Product Performance and Configuration Requirement/Quality Verification Cross Reference Index.

TABLE 4-1

Requirement	Verification	Requirement	Verification
3.1.1	4.2.2	3.1.11	4.2.14
3.1.2	4.2.3	3.1.11.1	4.2.14.1
3.1.3.2	4.2.4.1	3.1.12	4.2.15
3.1.3.2	4.2.4.2	3.1.12.1	4.2.15.1
3.1.3.2	4.2.4.3	3.1.13	4.2.16
3.1.3.3	4.2.5	3.1.13.1	4.2.16.1
3.1.3.4	4.2.4.4	3.1.14.1	4.3.1.1
3.1.4	4.2.7	3.1.14.2	4.3.1.2
3.1.5	4.2.8	3.1.14.3	4.3.1.3
3.1.6	4.2.9	3.1.14.4	4.3.1.4
3.1.7	4.2.10	3.1.15	4.3.2
3.1.8	4.2.11	3.1.15.1	4.3.2.1
3.1.9	4.2.12	3.1.16	4.3.3
3.1.10	4.2.13	3.2.2	4.3.4

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3.1.16 Leak Rate. With the assembly pressurized to 2 psig at $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$ using a mixture of 90% nitrogen and 10% helium, the leak rate shall not exceed 1.0×10^{-4} cc/sec/atm.

3.2 PRODUCT CONFIGURATION

3.2.1 Drawings. The configuration of the assembly shall be in accordance with Apollo G&N Drawing 2003994 and all drawings and engineering data referenced thereon.

3.2.2 Weight. The assembly weight shall be recorded.

4. QUALITY ASSURANCE PROVISIONS

4.1 GENERAL. The contractor responsible for the manufacture of the assembly shall be responsible for the accomplishment of each test required herein. See Table 4-1, Product Performance and Configuration Requirement/Quality Verification Cross Reference Index.

TABLE 4-1

Requirement	Verification	Requirement	Verification
3.1.1	4.2.2	3.1.11	4.2.14
3.1.2	4.2.3	3.1.11.1	4.2.14.1
3.1.3.2	4.2.4.1	3.1.12	4.2.15
3.1.3.2	4.2.4.2	3.1.12.1	4.2.15.1
3.1.3.2	4.2.4.3	3.1.13	4.2.16
3.1.3.3	4.2.5	3.1.13.1	4.2.16.1
3.1.3.4	4.2.4.4	3.1.14.1	4.3.1.1
3.1.4	4.2.7	3.1.14.2	4.3.1.2
3.1.5	4.2.8	3.1.14.3	4.3.1.3
3.1.6	4.2.9	3.1.14.4	4.3.1.4
3.1.7	4.2.10	3.1.15	4.3.2
3.1.8	4.2.11	3.1.15.1	4.3.2.1
3.1.9	4.2.12	3.1.16	4.3.3
3.1.10	4.2.13	3.2.2	4.3.4

4.2.4 Input Requirements. All tests shall be performed with the input requirements specified in paragraph 3.1.3 applied, when required to the pins of J9 as detailed below:

4.2.4.1 14V Supply. The 14 VDC Supply shall be applied to pin 1 with pin 8 used as the DC return.

4.2.4.2 28V Supply. The 28 VDC Supply shall be applied to pins 21 and 30 with pin 8 used as the DC return.

4.2.4.3 5V Supply. The 5 VDC Supply shall be applied to pins 62 and 64 with pins 63 and 65 used as the DC return.

4.2.4.4 Input Sync Pulse. The Input Sync Pulse specified in paragraph 3.1.3.4 shall be applied to pin 7.

4.2.5 115V Supply. The 115 VRM Supply shall be applied to pin 38 with pin 40 used as the AC return.

4.2.6 Intensity Measurements. Display indicator intensity measurements shall be calculated in the following manner:

- a. Electroluminescent Displays - intensity measurements shall be the average of six sample locations.
- b. Incandescent Displays - intensity measurements shall be the average of six sample locations at least 1/8 inch in from the illuminated segment border.
- c. Push Switches - intensity measurements shall be the average of a single centrally located reading for each of the push switches.

Display indicators shall be visually inspected for abnormal dark spots and light intensity variations.

4.2.7 Legend Illumination. Apply all inputs specified in paragraph 4.2.4. Vary the 10K ohm potentiometer from minimum to maximum resistance and verify that the brightness of the legends shall be as specified in paragraph 3.1.4.

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4.2.4 Input Requirements. All tests shall be performed with the input requirements specified in paragraph 3.1.3 applied, when required to the pins of J9 as detailed below:

4.2.4.1 14V Supply. The 14 VDC Supply shall be applied to pin 1 with pin 8 used as the DC return.

4.2.4.2 28V Supply. The 28 VDC Supply shall be applied to pins 21 and 30 with pin 8 used as the DC return.

4.2.4.3 5V Supply. The 5 VDC Supply shall be applied to pins 62 and 64 with pins 63 and 65 used as the DC return.

4.2.4.4 Input Sync Pulse. The Input Sync Pulse specified in paragraph 3.1.3.4 shall be applied to pin 7.

4.2.5 115V Supply. The 115 VRM Supply shall be applied to pin 38 with pin 40 used as the AC return.

4.2.6 Intensity Measurements. Display indicator intensity measurements shall be calculated in the following manner, with no individual readings greater than 25% from the spec limit for the average.

- a. Electroluminescent Displays - intensity measurements shall be the average of six sample segments, with the exception of COMP ACTY which is to be measured and recorded as an individual segment. See paragraph 4.2.7, 4.2.14 and 4.2.16.
- b. Incandescent Displays - intensity measurements shall be the average of six sample legends at least 1/8 inch in from the illuminated legend border. See paragraphs 4.2.14 and 4.2.15.
- c. Push Switches - intensity measurements shall be the average of a single centrally located reading for each of the push switches. See paragraph 4.2.8

Display indicators shall be visually inspected for abnormal dark spots and light intensity variations.

4.2.7 Legend Illumination. Apply all inputs specified in paragraph 4.2.4. Vary the 10K ohm potentiometer from minimum to maximum resistance and verify the intensity of the segments as specified in paragraph 3.1.4. See paragraph 4.2.6.a.

4.2.4 Input Requirements. All tests shall be performed with the input requirements specified in paragraph 3.1.3 applied, when required to the pins of J9 as detailed below:

4.2.4.1 14V Supply. The 14 VDC Supply shall be applied to pin 1 with pin 8 used as the DC return.

4.2.4.2 28V Supply. The 28 VDC Supply shall be applied to pins 21 and 30 with pin 8 used as the DC return.

4.2.4.3 5V Supply. The 5 VDC Supply shall be applied to pins 62 and 64 with pins 63 and 65 used as the DC return. Current shall be measured as specified in Paragraphs 3.1.11 and 3.1.12.

4.2.4.4 Input Sync Pulse. The Input Sync Pulse specified in paragraph 3.1.3.4 shall be applied to pin 7.

4.2.5 115V Supply. The 115 VRM Supply shall be applied to pin 38 with pin 40 used as the AC return.

4.2.6 Intensity Measurements. Display indicator intensity measurements shall be calculated in the following manner, with no individual readings greater than 25% from the spec limit for the average of the electroluminescent displays and push switches.

- a. Electroluminescent Displays - intensity measurements shall be the average of six sample segments, with the exception of COMP ACTY which is to be measured and recorded as an individual segment. See paragraphs 4.2.7, 4.2.14 and 4.2.16.
- b. Incandescent Displays - intensity measurements shall be made on all legends at least 1/8 inch in from the illuminated legend border. See paragraphs 4.2.14 and 4.2.15.
- c. Push Switches - intensity measurements shall be the average of a single centrally located reading for each of the push switches. See paragraph 4.2.8.

Display indicators shall be visually inspected for abnormal dark spots and light intensity variations.

4.2.7 Legend Illumination. Apply all inputs specified in paragraph 4.2.4. Vary the 10K ohm potentiometer from minimum to maximum resistance and verify the intensity of the segments as specified in paragraph 3.1.4. See paragraph 4.2.6a.

4.1.1 Test Conditions

4.1.1.1 Environmental. The assembly shall be tested under the following ambient conditions:

- a. Temperature: $25^{\circ} \pm 10^{\circ}\text{C}$
- b. Relative Humidity: 90% max
- c. Barometric Pressure: 28 to 32 inches of Hg

4.1.1.2 Assembly Case Ground. The dynamic tests specified in paragraphs 4.2.6 and 4.2.16 shall be conducted with pins 8 and 39 of J9 connected to ground (0 VDC).

4.1.2 Nonconforming Units. Failure of the unit to pass any examination or test of this specification shall automatically classify the unit as nonconforming. Each nonconforming unit corrected by the contractor shall be reinspected. Reinspection may be limited to the test or examination which defined the nonconformance, or, when directed by the cognizant inspector, a complete retest and re-examination may be required. Nonconforming units which have not been corrected will be considered for acceptance only upon formal application by the contractor to the cognizant NASA representative.

4.2 TESTS

4.2.1 Drawing Compliance. The assembly shall be visually examined for compliance to the requirements of APOLLO G&N Drawing 2003994. Particular attention shall be given to inspection for damage to surfaces, structure, and equipment, including contaminants, pin misalignment, and legibility and appearance of marking.

4.2.2 Continuity. Verify that the resistance between pin 39 of J9 and the assembly housing is in accordance with paragraph 3.1.1.

4.2.3 Insulation Resistance. Remove all lights and modules except Keyboard from assembly. Using test equipment with a test potential of 50 VDC limited to a short circuit current of 50 microamperes, measure the resistance between pin 39 of J9 and all other pins of J9 connected together. Verify that the resistance complies with that specified in paragraph 3.1.2.

4.2.8 Keyboard Illumination. Apply the voltage specified in paragraph 4.2.5, and set the 115V Supply as described in paragraph 3.1.5. Verify that the Keyboard keys are illuminated as specified in paragraph 3.1.5.

4.2.9 Keyboard Outputs. Apply all inputs specified in section 4.2.4. Depress each Keyboard key individually and verify that the outputs, monitored at the output pins, are as specified in paragraph 3.1.6.

4.2.9.1 Keyboard Loads. Each Keyboard output pin listed in Table 3-1 shall be loaded with a 20K ohm \pm 5% resistance to ground (0 VDC).

4.2.10 Incandescent Indicators. Apply all inputs specified in paragraph 4.2.4. Apply the logic input as specified in paragraph 3.1.7 and verify that all incandescent indicators are OFF.

4.2.11 Flashing Alarm Characters. Apply all inputs specified in paragraph 4.2.4. Apply the Flasher Timing Pulse as specified in paragraph 3.1.8 and verify that the alarm indicators KEY REL and OPR ERR flash in accordance with paragraph 3.1.8.

4.2.12 Flashing Noun Characters. Apply all inputs specified in paragraph 4.2.4. Apply the Flasher Timing Pulse and logic inputs specified in paragraph 3.1.9. Verify that the Noun numerical characters flash in accordance with paragraph 3.1.9.

4.2.13 Flashing Verb Characters. Apply all inputs specified in paragraph 4.2.4. Apply the Flasher Timing Pulse and logic inputs specified in paragraph 3.1.10. Verify that the Verb numerical characters flash in accordance with paragraph 3.1.10.

4.2.14 Status and Caution Indicators. Apply all inputs specified in paragraph 4.2.4. Apply logic "ones" (ref. para. 3.1.11.2) as specified in paragraph 3.1.11. Verify that the contact closures between the pins listed in Table 3-2, and the status and caution indicators are illuminated in accordance with paragraph 3.1.11.

4.2.14.1 Logic Zero Input. Apply all inputs specified in paragraph 4.2.4. Apply logic "zeros" (ref. para. 3.1.11.2) as specified in paragraph 3.1.11.1. Verify that the contact closures between the pins listed in Table 3-2 are in accordance with paragraph 3.1.11.1.

4.2.4 Input Requirements. All tests shall be performed with the input requirements specified in paragraph 3.1.3 applied, when required to the pins of J9 as detailed below:

4.2.4.1 14V Supply. The 14 VDC Supply shall be applied to pin 1 with pin 8 used as the DC return.

4.2.4.2 28V Supply. The 28 VDC Supply shall be applied to pins 21 and 30 with pin 8 used as the DC return.

4.2.4.3 5V Supply. The 5 VDC Supply shall be applied to pins 62 and 64 with pins 63 and 65 used as the DC return.

4.2.4.4 Input Sync Pulse. The Input Sync Pulse specified in paragraph 3.1.3.4 shall be applied to pin 7.

4.2.5 115V Supply. The 115 VRM Supply shall be applied to pin 38 with pin 40 used as the AC return.

4.2.6 Intensity Measurements. Display indicator intensity measurements shall be calculated in the following manner:

- a. Electroluminescent Displays - intensity measurements shall be the average of six sample locations.
- b. Incandescent Displays - intensity measurements shall be the average of six sample locations at least 1/8 inch in from the illuminated segment border.
- c. Push Switches - intensity measurements shall be the average of a single centrally located reading for each of the push switches.

Display indicators shall be visually inspected for abnormal dark spots and light intensity variations.

4.2.7 Legend Illumination. Apply all inputs specified in paragraph 4.2.4. Vary the 10K ohm potentiometer from minimum to maximum resistance and verify that the brightness of the legends shall be as specified in paragraph 3.1.4.

APOLLO G&N Specification
PS 2003994
Rev C

4.2.14.2 Logic Input. Only one logic input shall be applied at any one time.

4.2.15 Isolated Relay Indicators. Apply all inputs specified in paragraph 4.2.2. Apply RLYWD 12 (ref. para. 3.1.12.3) and logic "ones" (ref. para. 3.1.12.2) as specified in paragraph 3.1.12. Verify that the contact closures between the pins listed in Table 3-3, and the isolated relay indicators are illuminated in accordance with paragraph 3.1.12.

4.2.15.1 Logic Zero Input. Apply all inputs specified in paragraph 4.2.4. Apply logic "zeros" (ref. para. 3.1.12.3) as specified in paragraph 3.1.12.1. Verify that the contact closures between the pins listed in Table 3-3 are in accordance with paragraph 3.1.12.1.

4.2.15.2 Logic Inputs. Only one logic input shall be applied at any one time.

4.2.16 Numerical Electroluminescent Indicators. Apply all inputs specified in section 4.2.4. Set the 10K ohm potentiometer for maximum resistance. Apply the appropriate RLYWD and RLYBT combinations specified in Table 3-4 and 3-5, and verify that the specified numerical electroluminescent indicators are illuminated in accordance with paragraph 3.1.13.

4.2.16.1 Apply all inputs specified in paragraph 4.2.4. Set the 10K ohm potentiometer to minimum resistance. Program numerical electroluminescent indicators as specified in paragraph 3.1.13.1. Verify that the numerical electroluminescent indicators shall be OFF.

5. PREPARATION FOR DELIVERY

5.1 GENERAL. Preparation for delivery shall be in accordance with Specification ND 1002214. The assembly shall be pressurized to .7 to 1.5 psig.

6. NOTES: None.

4.2.14.2 Logic Input. Only one logic input shall be applied at any one time.

4.2.15 Isolated Relay Indicators. Apply all inputs specified in paragraph 4.2.2. Apply RLYWD 12 (ref. para. 3.1.12.3) and logic "ones" (ref. para. 3.1.12.2) as specified in paragraph 3.1.12. Verify that the contact closures between the pins listed in Table 3-3, and the isolated relay indicators are illuminated in accordance with paragraph 3.1.12. See paragraph 4.2.6b.

4.2.15.1 Logic Zero Input. Apply all inputs specified in paragraph 4.2.4. Apply logic "zeros" (ref. para. 3.1.12.3) as specified in paragraph 3.1.12.1. Verify that the contact closures between the pins listed in Table 3-3 are in accordance with paragraph 3.1.12.1.

4.2.15.2 Logic Inputs. Only one logic input shall be applied at any one time.

4.2.16 Numerical Electroluminescent Indicators. Apply all inputs specified in section 4.2.4. Set the 10K ohm potentiometer for maximum resistance. Apply the appropriate RLYWD and RLYBT combinations specified in Table 3-4 and 3-5, and verify that the specified numerical electroluminescent indicators are illuminated in accordance with paragraph 3.1.13. See paragraph 4.2.6a.

4.2.16.1 Apply all inputs specified in paragraph 4.2.4. Set the 10K ohm potentiometer to minimum resistance. Program numerical electroluminescent indicators as specified in paragraph 3.1.13.1. Verify that the numerical electroluminescent indicators shall be OFF.

5. PREPARATION FOR DELIVERY

5.1 GENERAL. Preparation for delivery shall be in accordance with Specification MD 1002214. The assembly shall be pressurized to .7 to 1.5 psig.

6. NOTES: None.

4.3.1.3 Low Marginal Voltages/High Temperature. Set the input supply voltage and the ambient temperature to the limits specified in paragraph 3.1.14.3. Verify that the module shall perform in accordance with paragraph 3.1.14.3.

4.3.1.4 High Marginal Voltages/High Temperature. Set the input supply voltage and the ambient temperature to the limits specified in paragraph 3.1.14.4. Verify that the module shall perform in accordance with paragraph 3.1.14.4.

The DSKY shall be subjected to the designated temperatures for one-half hour prior to performing any electrical tests.

This test may be performed with a set of test display indicators. Original assembly indicators will be reinstalled in the DSKY after completion of this test.

4.3.2 Vibration. Subject the assembly to the vibration specified in paragraph 3.1.15. Verify that the assembly performs in accordance with paragraph 3.1.15.

4.3.2.1 Switch Chatter. Verify that there is no keyboard switch chatter as specified in paragraph 3.1.15.1.

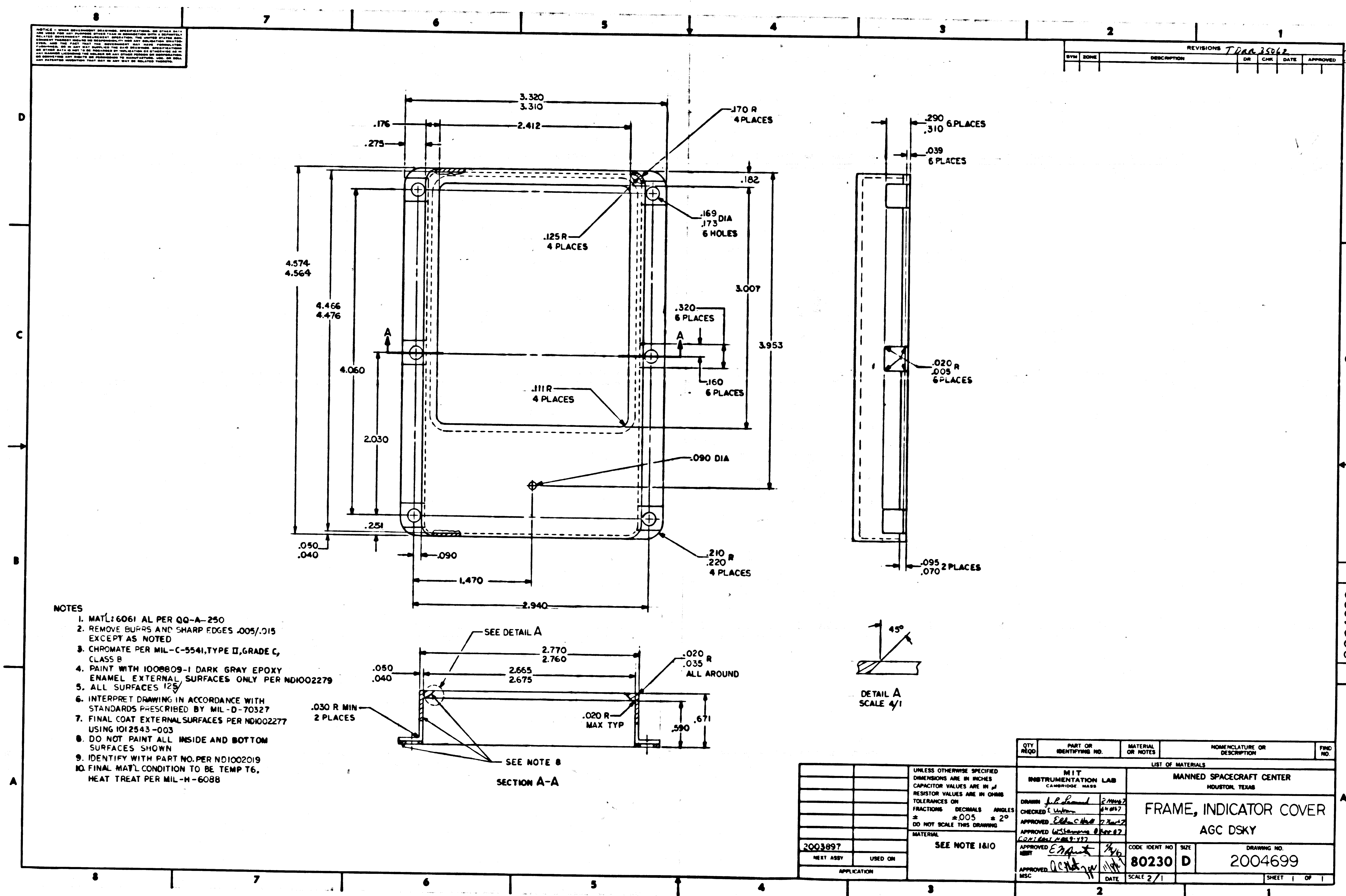
4.3.3 Leak Rate. Pressurize the assembly to 2 psig at $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$ using the mixture specified in paragraph 3.1.16. After pressurization place assembly in a vacuum, and verify that the leak rate does not exceed that specified in paragraph 3.1.16 when measured at $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$.

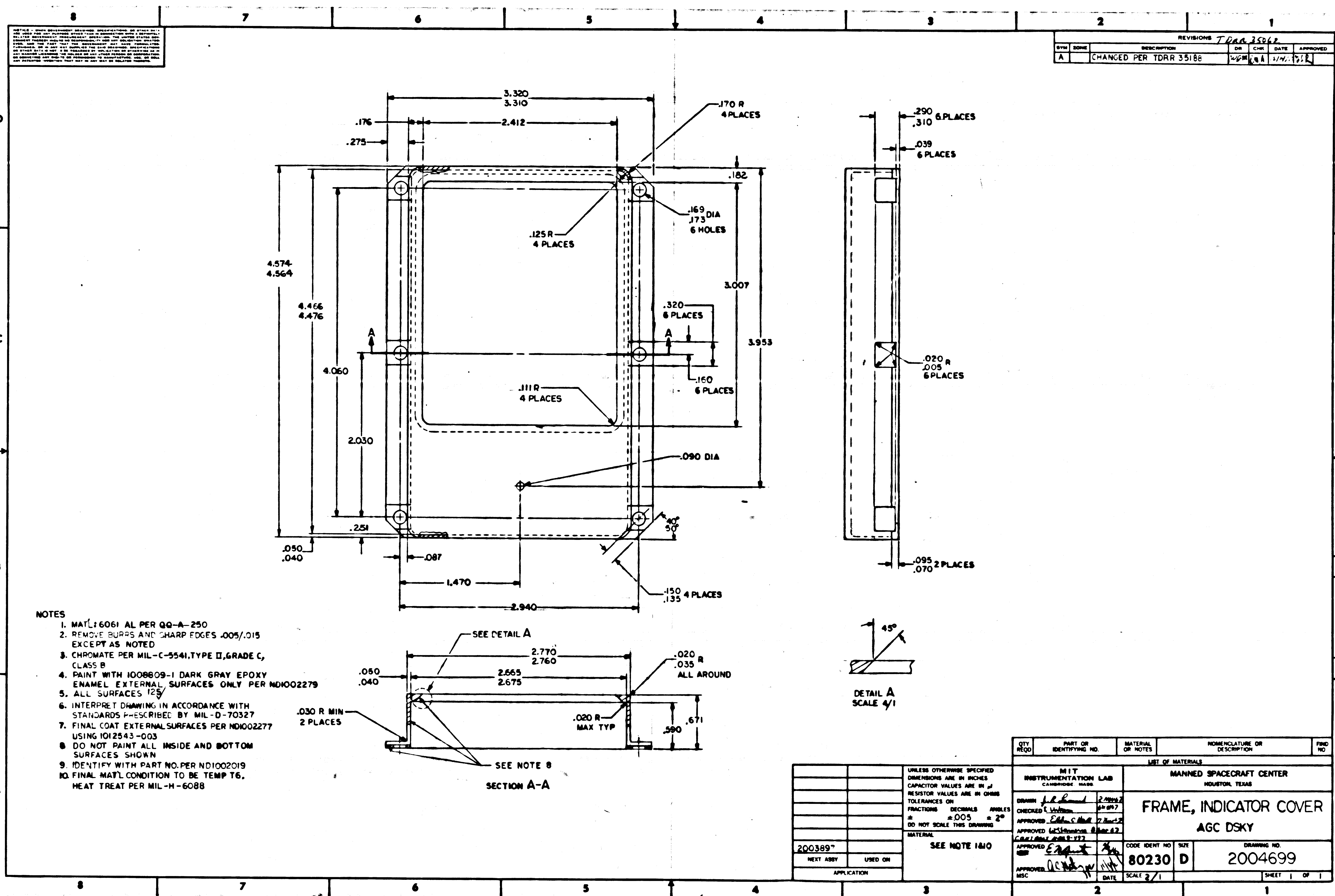
4.3.4 Weight. Weigh the assembly to the nearest .01 pound. Verify that the weight is in accordance with paragraph 3.2.2.

5. PREPARATION FOR DELIVERY

5.1 GENERAL. Preparation for delivery shall be in accordance with Specification ND 1002214. The assembly shall be pressurized to .7 to 1.5 psig.

6. NOTES: None.

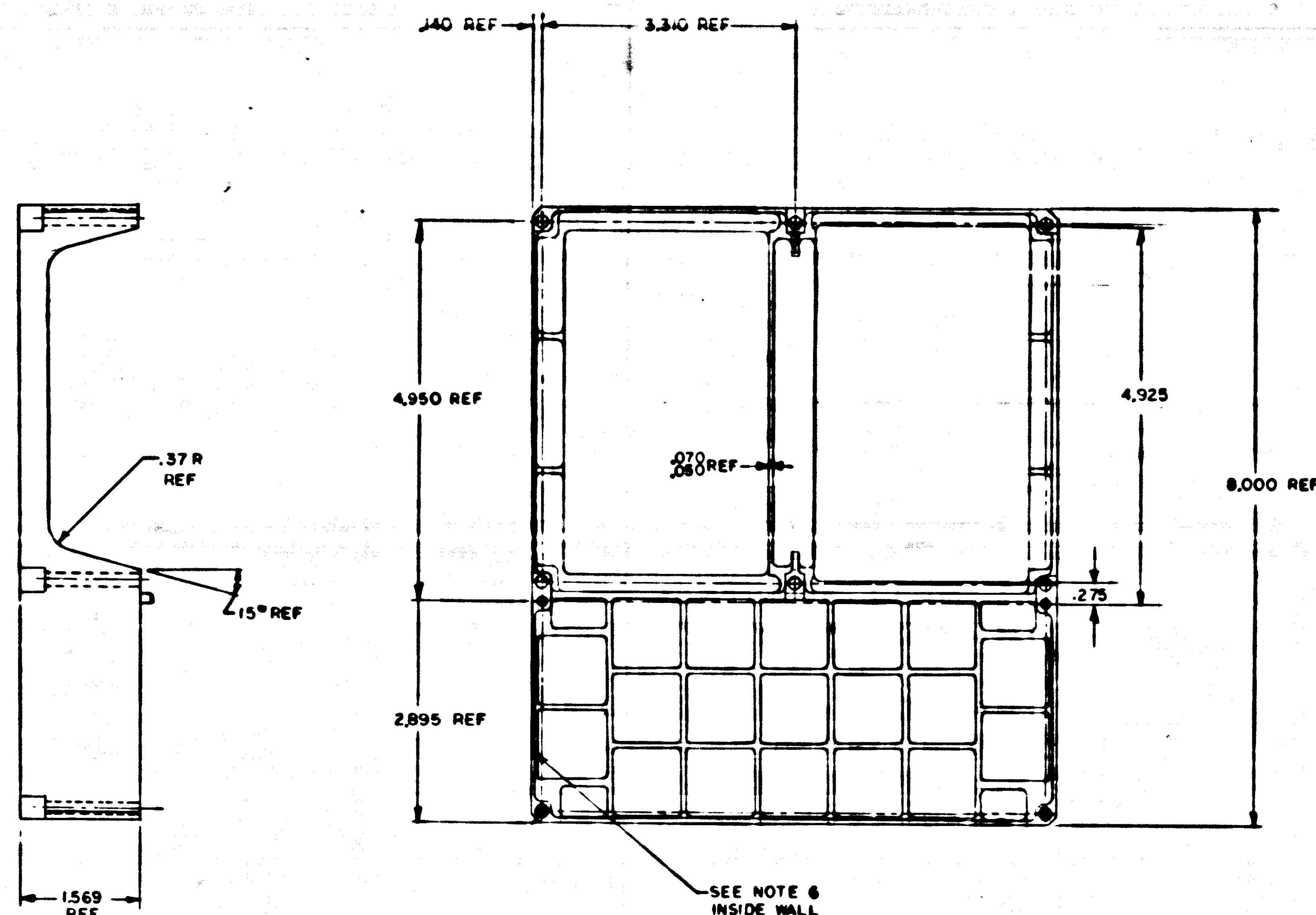
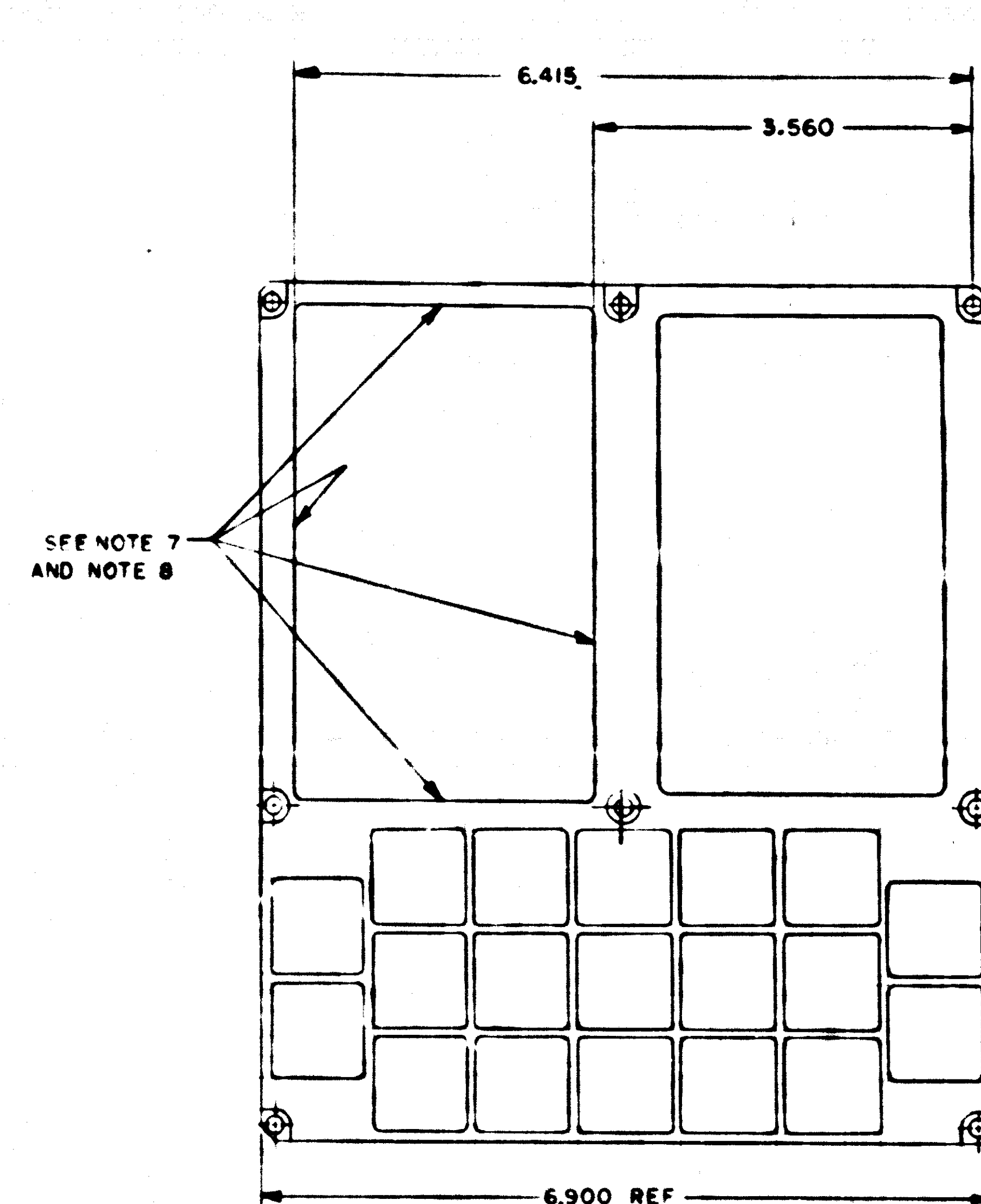




QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FINO NO
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS				
MANNED SPACECRAFT CENTER HOUSTON, TEXAS				
FRAME, INDICATOR COVER AGC DSKY				
DRAWN <i>J. R. [Signature]</i> 2/20/62 CHECKED <i>L. [Signature]</i> 4/1/62 APPROVED <i>E. [Signature]</i> 7/1/62 APPROVED <i>G. [Signature]</i> 8/1/62				
MATERIAL SEE NOTE 1 & 10				
2003897 NEXT ASSY USED ON				
APPLICATION				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μ RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS DECIMALS ANGLES ± .005 ± .2° DO NOT SCALE THIS DRAWING				
CODE IDENT NO SIZE 80230 D				
DRAWING NO. 2004699				
APPROVED <i>[Signature]</i> DATE SCALE 2/1 SHEET 1 OF 1				

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON DIMENSIONS
ARE AS SHOWN
FRACTIONS
DECIMALS
ANGLES
DO NOT SCALE THIS DRAWING
MATERIAL
NEXT ASSY
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APPLICATION

REVISIONS				
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1				

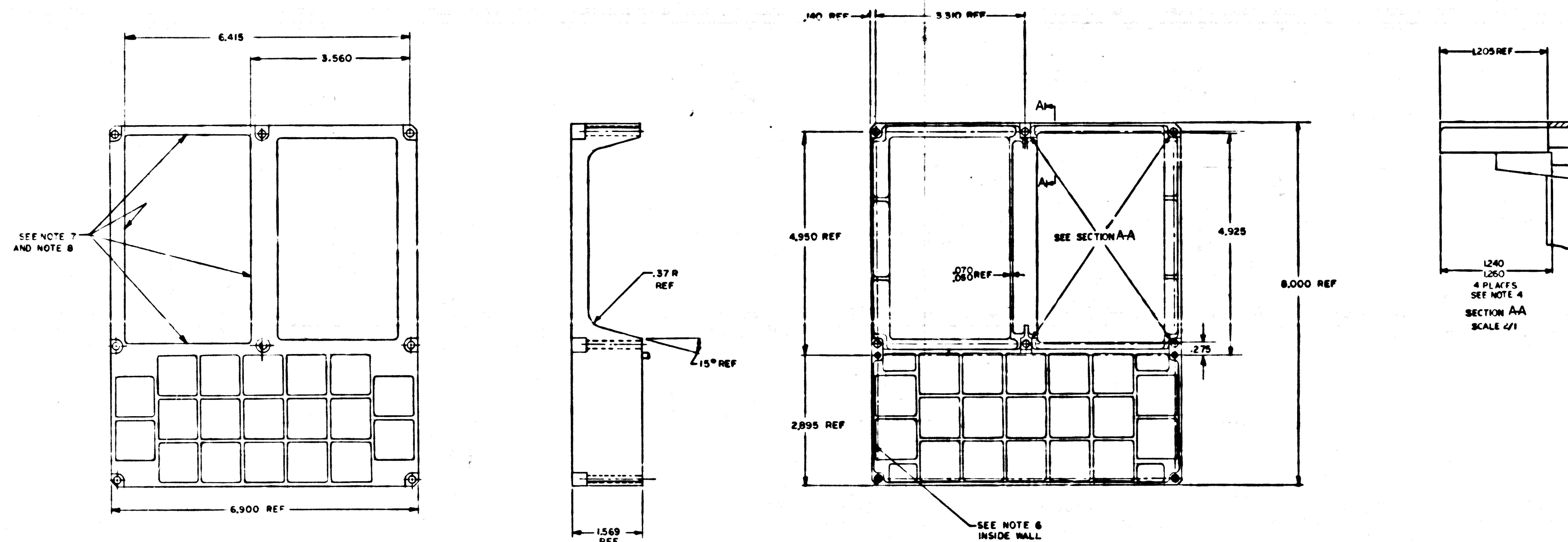


NOTES

1. MATL MAKE FROM 2004929-021
2. REMOVE BURRS AND SHARP EDGES .005/.015
3. ALL SURFACES 125
4. TOUCH UP ALL EXPOSED MACHINED SURFACES PER ND1002040, DO NOT EPOXY COAT
5. UNLESS OTHERWISE SPECIFIED ALL FILLETS AND RADI TO BE .09R MAX.
6. IDENTIFY WITH PART NO. PER ND1002049 APPROXIMATELY WHERE SHOWN
7. PAINT INDICATED SURFACES WITH 1008809-1, DARK GRAY EPOXY ENAMEL PER 1002279
8. FINAL COAT INDICATED SURFACES PER ND1002277 USING 1012543-003
9. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOBENCLATURE OR DESCRIPTION	7 NO 2
		LIST OF MATERIALS		
		MANNED SPACECRAFT CENTER HOUSTON, TEXAS		
		COVER, FRONT		
		AGC DSKY		
		DRAWING NO. 2004739		
		CODE IDENT NO SIZE 80230 E		
		DATE SCALE		
		SHEET 1 OF 1		

SEE NOTE 1



- NOTES
1. MATERIAL MAKE FROM 2004929-021
 2. REMOVE BURRS AND SHARP EDGES .005/.015
 3. ALL SURFACES 125
 4. TOUCH UP ALL EXPOSED MACHINED SURFACES PER ND1002040, DO NOT EPOXY COAT
 5. UNLESS OTHERWISE SPECIFIED ALL FILLETS AND RADII TO BE .039 MAX.
 6. IDENTIFY WITH PART NO. PER ND1002019 APPROXIMATELY WHERE SHOWN
 7. PAINT INDICATED SURFACES WITH 1008809-1, DARK GRAY EPOXY ENAMEL PER 1002279
 8. FINAL COAT INDICATED SURFACES PER ND1002277 USING 1012543-003
 9. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

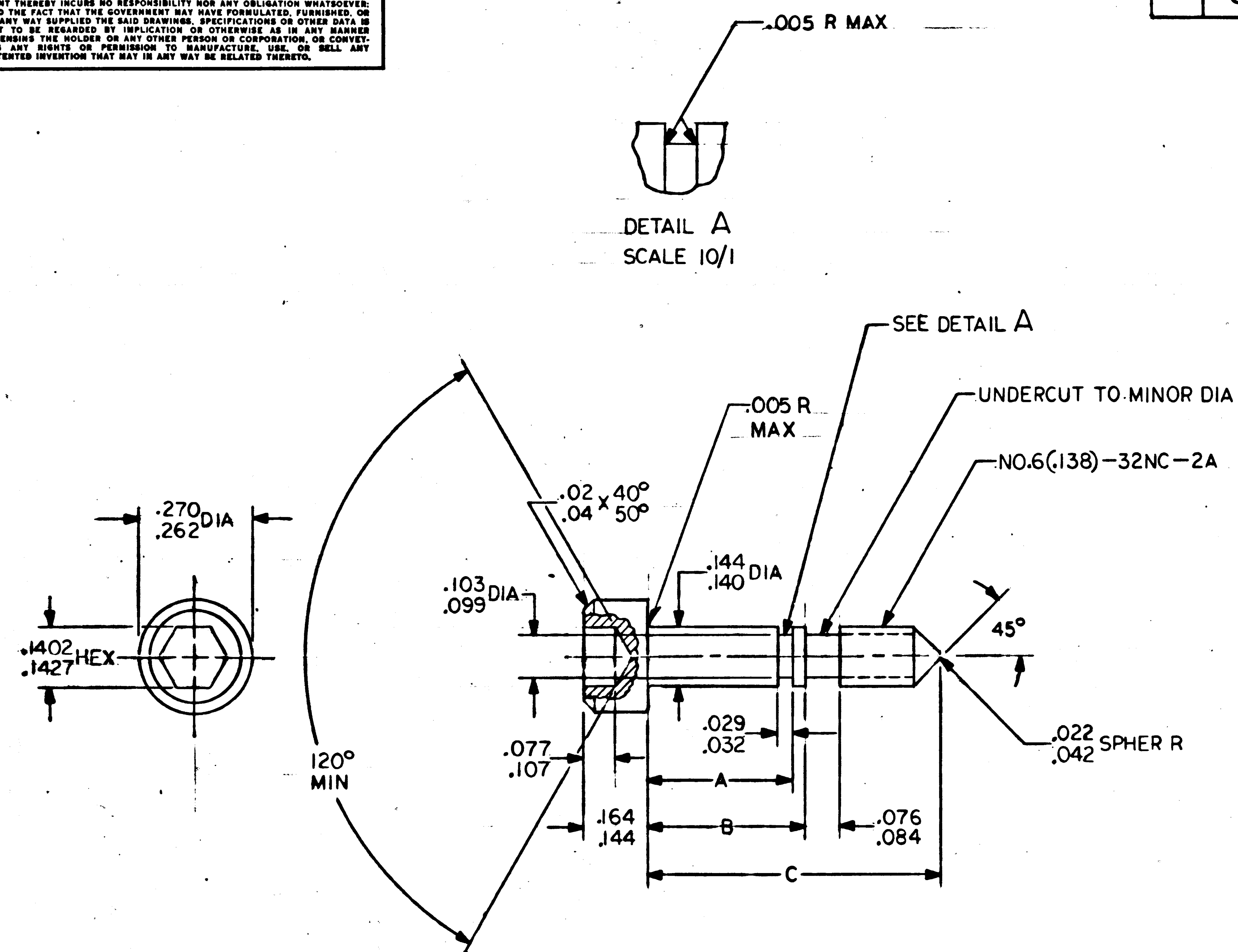
QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	SIGNATURE OR DESCRIPTION	FILE NO.
MIT INSTRUMENTATION LAB				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μ F RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS DECIMALS PERCENTS				
2003985		DO NOT SCALE THIS DRAWING	APPROVED [Signature]	10/10/97
2003950			APPROVED [Signature]	10/10/97
2003994			APPROVED [Signature]	10/10/97
NEXT ASSY	USED ON	SEE NOTE 1	APPROVED [Signature]	10/10/97
APPLICATION			APPROVED [Signature]	10/10/97

LIST OF MATERIALS			
MANNED SPACECRAFT CENTER HOUSTON, TEXAS			
COVER, FRONT			
AGC DSKY			
CODE IDENT NO	SIZE	DRAWING NO.	
80230	E	2004739	
DATE	SCALE	SHEET	OF
10/10/97	1/1	1	1

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THEREBY.

2004932

REVISIONS 20273				
SYM	ZONE	DESCRIPTION	DR	CHK



NOTES

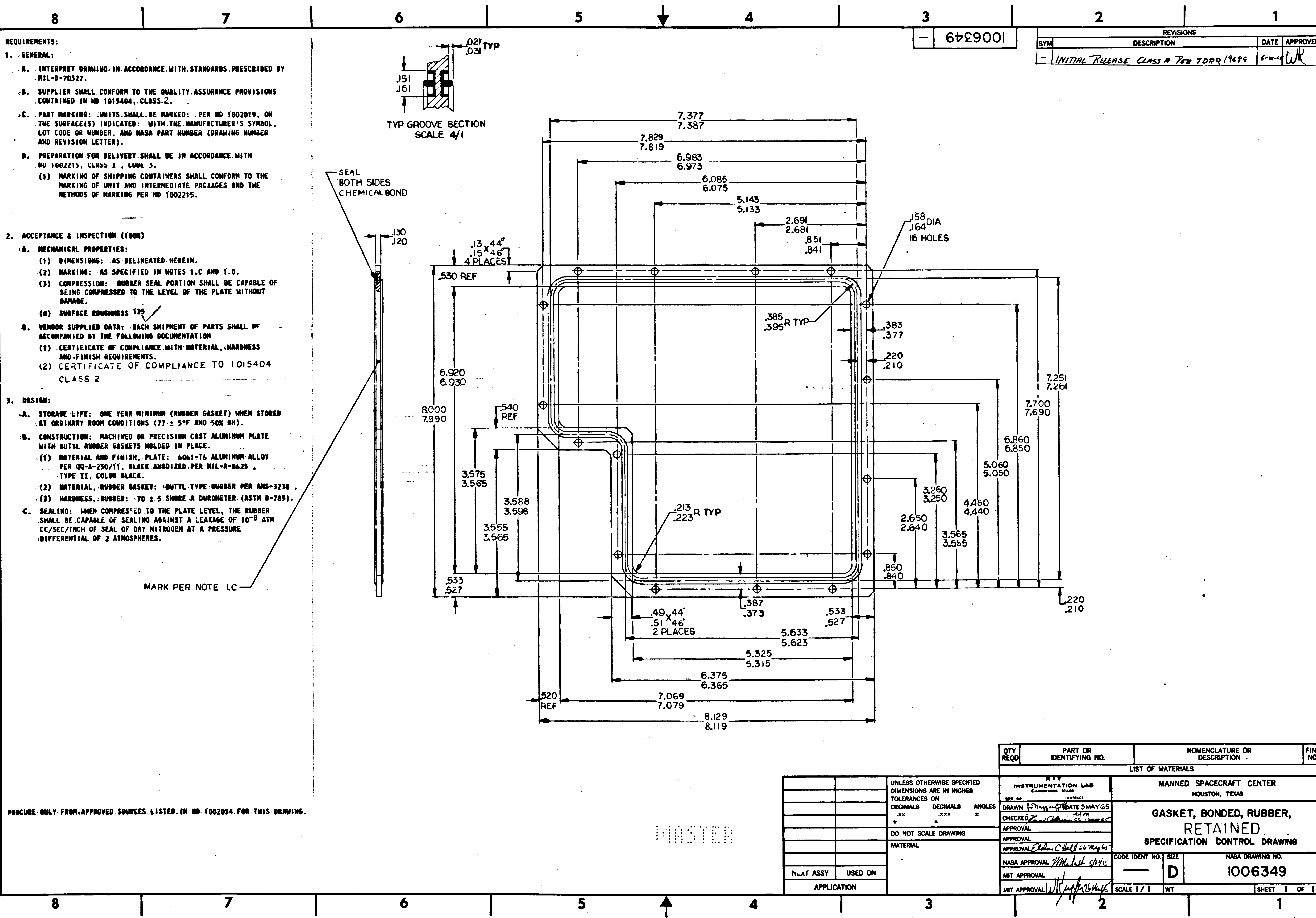
1. MATL: 410 CRES, CLASS 410, COND. A
PER QQ-S-763 (HEAD TO BE COLD FORMED)
2. REMOVE BURRS AND SHARP EDGES .005 MAX
3. PASSIVATE PER MIL-F-14072,
FINISH E300, TYPE I
4. INTERPRET DRAWING IN ACCORDANCE WITH
STANDARDS PRESCRIBED BY MIL-D-70327
5. HEAT TREAT TO ROCKWELL RC36-43
6. CONCENTRICITY: ALL DIAMETERS MUST BE
WITHIN .005 T.I.R.
7. IDENTIFY WITH DRAWING NO. AND REVISION
PER ND1002019

DASH NO.	DIM. A	DIM. B	DIM. C
2004932-001	.336	.378	.755
	.334	.374	.765
2004932-002	.211	.253	.580
	.209	.249	.570

2003909	
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μ f
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
 \pm \pm $\pm 1^\circ$
DO NOT SCALE THIS DRAWING
MATERIAL
SEE NOTE 1

QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND NO.
LIST OF MATERIALS				
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS		
DRAWN	J.P. Leland	3/11/65	SCREW, JACKING AGC DSKY	
CHECKED	Roger	2/24/65		
APPROVED	A. Underhill	1 Jun 65		
APPROVED	Edson Chell	21 Jun 65		
APPROVED MIT	W. Kuyper	2/24/65	CODE IDENT NO.	SIZE
APPROVED MSC	Michael	6/24/65	80230	C
DATE		SCALE 4/1	DRAWING NO. 2004932	
			SHEET	OF



REQUIREMENTS:

1. GENERAL:

- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS CONTAINED IN MD 1015404, CLASS 2.
- PART MARKING: UNITS SHALL BE MARKED PER MD 1002019, ON THE SURFACE(S) INDICATED WITH THE MANUFACTURER'S SYMBOL, LOT CODE OR NUMBER, AND NASA PART NUMBER (DRAWING NUMBER AND REVISION LETTER).
- PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH MD 1002215, CLASS 1, CODE 3.
 - MARKING OF SHIPPING CONTAINERS SHALL CONFORM TO THE MARKING OF UNIT AND INTERMEDIATE PACKAGES AND THE METHODS OF MARKING PER MD 1002215.

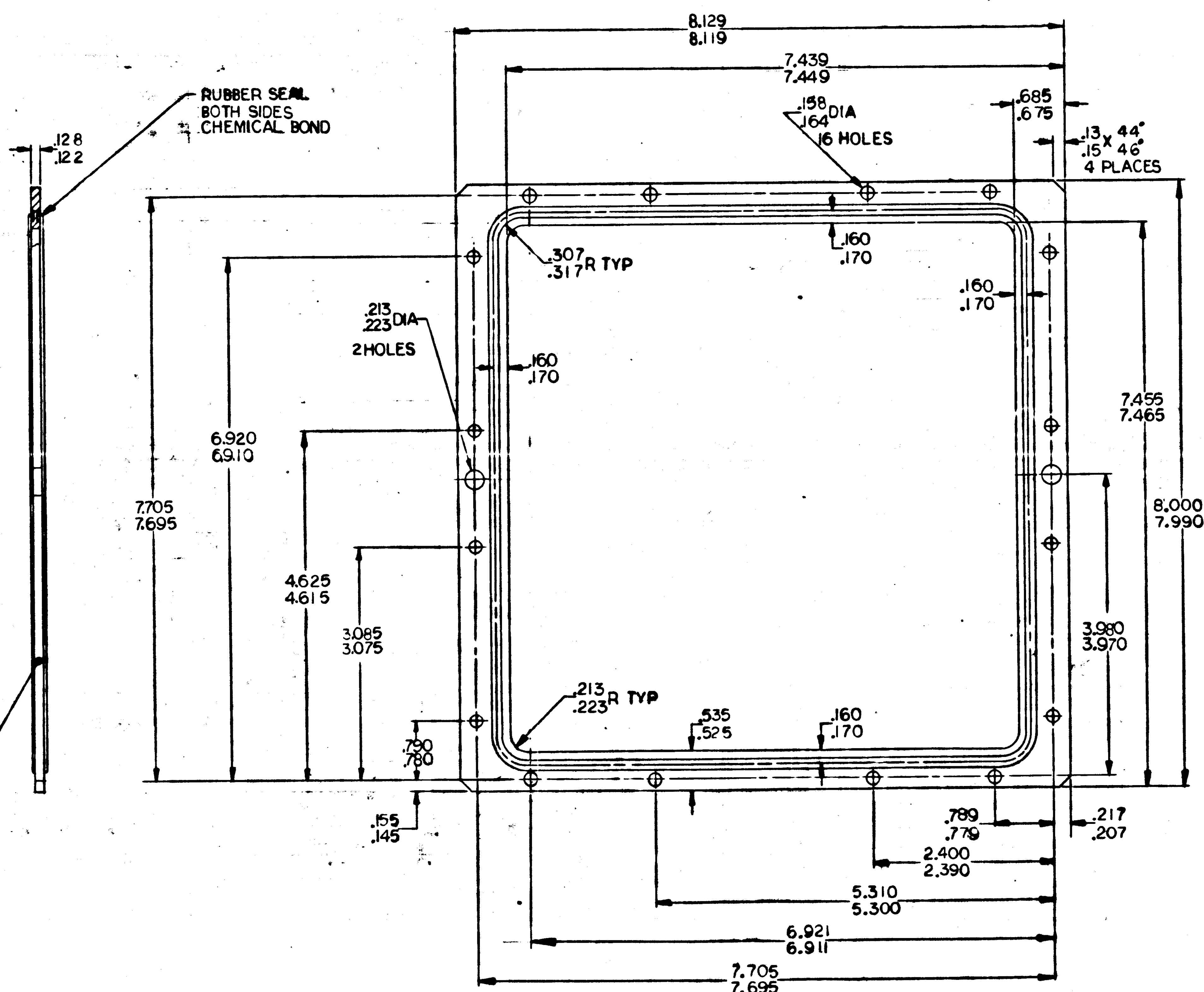
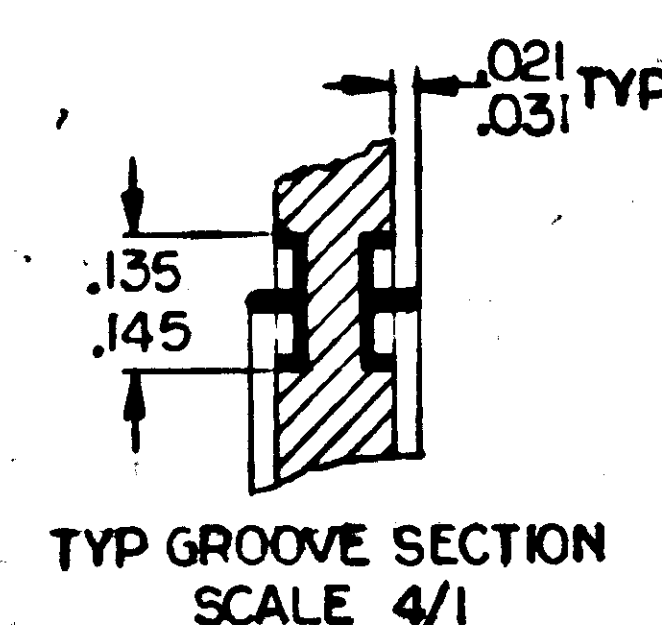
2. ACCEPTANCE & INSPECTION (100%)

- MECHANICAL PROPERTIES:
 - DIMENSIONS: AS DELINEATED HEREIN.
 - MARKING: AS SPECIFIED IN NOTES 1.C AND 1.D.
 - COMPRESSION: RUBBER SEAL PORTION SHALL BE CAPABLE OF BEING COMPRESSED TO THE LEVEL OF THE PLATE WITHOUT DAMAGE.
 - SURFACE ROUGHNESS: 125/
- VENDOR SUPPLIED DATA: EACH SHIPMENT OF PARTS SHALL BE ACCOMPANIED BY THE FOLLOWING DOCUMENTATION:
 - CERTIFICATE OF COMPLIANCE WITH MATERIAL, HARDNESS AND FINISH REQUIREMENTS.
 - CERTIFICATE OF COMPLIANCE WITH MD 1015404, CLASS 2.

3. DESIGN:

- STORAGE LIFE: ONE YEAR MINIMUM (RUBBER GASKET) WHEN STORED AT ORDINARY ROOM CONDITIONS (77° ± 5°F AND 50% RH).
- CONSTRUCTION: MACHINED OR PRECISION CAST ALUMINUM PLATE WITH BUTYL RUBBER GASKETS MOLDED IN PLACE.
 - MATERIAL AND FINISH, PLATE: 6061-T6 ALUMINUM ALLOY PER QQ-A-250/11, BLACK ANODIZED PER MIL-A-8625, TYPE II, COLOR BLACK.
 - MATERIAL, RUBBER GASKET: BUTYL TYPE RUBBER PER AMS-3230A.
 - HARDNESS, RUBBER: 70 ± 5 SHORE A DUROMETER (ASTM D-795).
- SEALING: WHEN COMPRESSED TO THE PLATE LEVEL, THE RUBBER SHALL BE CAPABLE OF SEALING AGAINST A LEAKAGE OF 10⁻⁶ IN³/CC/SEC/INCH OF SEAL OF DRY NITROGEN AT A PRESSURE DIFFERENTIAL OF 12 ATMOSPHERES.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN MD 1002034 FOR THIS DRAWING.



QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
		LIST OF MATERIALS	
		INSTRUMENTATION LAB CAMBRIDGE, MASS.	
		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
		GASKET, BONDED, RUBBER, RETAINED	
		SPECIFICATION CONTROL DRAWING	
		CODE IDENT NO. 80230	
		SIZE D	
		NASA DRAWING NO. 1006350	
		SCALE 1/1	
		WT	
		SHEET 1 OF 1	

QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
		LIST OF MATERIALS	
		INSTRUMENTATION LAB CAMBRIDGE, MASS.	
		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
		GASKET, BONDED, RUBBER, RETAINED	
		SPECIFICATION CONTROL DRAWING	
		CODE IDENT NO. 80230	
		SIZE D	
		NASA DRAWING NO. 1006350	
		SCALE 1/1	
		WT	
		SHEET 1 OF 1	

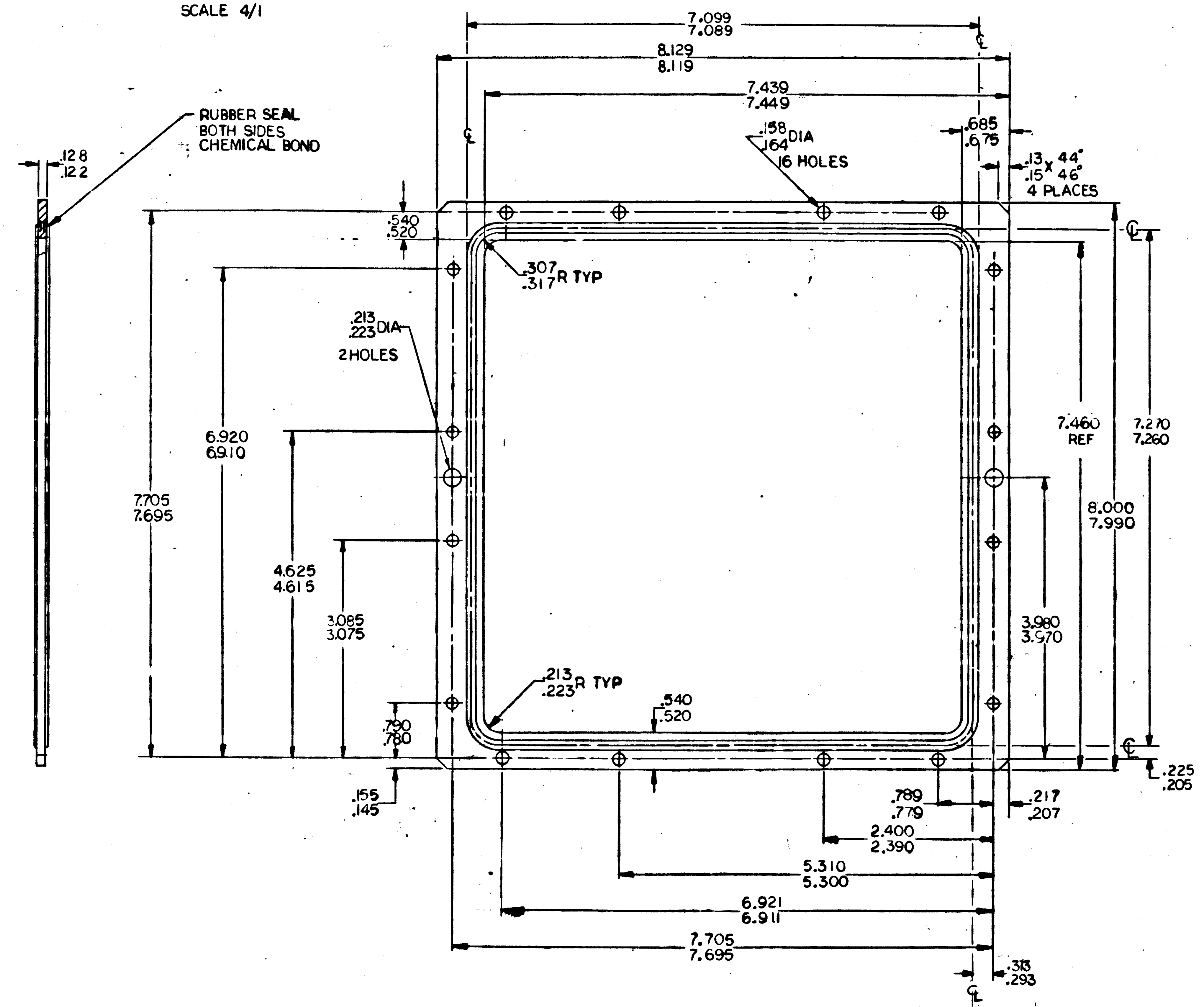
1. GENERAL:

- ## 2. ACCEPTANCE & INSPECTION (100%)

- ### 3. DESIGN

- A. STORAGE LIFE: ONE YEAR MINIMUM (RUBBER GASKET) WHEN STORED AT ORDINARY ROOM CONDITIONS (77° ± 5°F AND 50% RH).
- B. CONSTRUCTION: MACHINED OR PRECISION CAST ALUMINUM PLATE WITH BUTYL RUBBER GASKETS MOLDED IN PLACE.
- (1) MATERIAL AND FINISH, PLATE: 6061-T6 ALUMINUM ALLOY PER QQ-A-250/11, CHROMATE FILM PER MIL-C-5541, TYPE II, CLASS 3.
- (2) MATERIAL, RUBBER GASKET: BUTYL TYPE RUBBER PER AMS-3238
- (3) HARDNESS, RUBBER: 70 ± 5 SHORE A DUROMETER (ASTM D-785)
- C. SEALING: WHEN COMPRESSED TO THE PLATE LEVEL, THE RUBBER SHALL BE CAPABLE OF SEALING AGAINST A FLAKE OF 2×10^{-8} ATM CC/SEC/IN OF SEAL OF DRY NITROGEN AT A PRESSURE DIFFERENTIAL OF 2 ATMOSPHERES AND A TEMPERATURE OF 10° TO 82°C.

TYP GROOVE SECTION
SCALE 4/1



▽	1006350
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REVISIONS			
SYM	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE CLASS A PER TDRR 20100	6-15-68	
A	REVISED PER TORR 22129	9/14	EAL <i>[Signature]</i>

		QTY REQ PART OR IDENTIFYING NO.		NOMENCLATURE OR DESCRIPTION FIND NO.	
		LIST OF MATERIALS			
		RTTY INSTRUMENTATION LAB CLASSIFICATION: UNCLASSIFIED DATE: 11/1/81		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
		DRAWN <i>W. J. [Signature]</i> DATE <i>11/1/81</i> CHECKED <i>[Signature]</i> DATE <i>11/1/81</i> APPROVAL APPROVAL <i>[Signature]</i> APPROVAL		GASKET, BONDED, RUBBER, RETAINED SPECIFICATION CONTROL DRAWING	
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON DECIMALS DECIMALS ANGLES .XXX .XXX ° ± ± ±		DO NOT SCALE DRAWING MATERIAL	
		NASA APPROVAL <i>[Signature]</i> DATE <i>11/1/81</i> MIT APPROVAL <i>[Signature]</i> DATE <i>11/1/81</i> MIT APPROVAL		CODE IDENT NO. SIZE 80230 D NASA DRAWING NO. 1006350	
APPLICATION NEXT ASSY USED ON		SCALE 1/1 WT. SHEET 1 OF 1			

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY FOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REQUIREMENTS:

1. GENERAL:

- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS AS CONTAINED IN MIL-Q-9858.
- MARKING: UNITS SHALL BE MARKED PER ND 1002019 WITH THE NASA PART NUMBER (DRAWING NUMBER, REVISION LETTER AND DASH NUMBER).
- PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH ND 1002215 CLASS I, CODE 3.
 - MARKING OF SHIPPING CONTAINERS SHALL CONFORM TO THE MARKING OF UNIT AND INTERMEDIATE PACKAGES AND METHODS OF MARKING AS SPECIFIED IN ND 1002215.

- WHEN SUBJECTED TO THE ENVIRONMENTAL REQUIREMENTS OF ND 1002056, UNITS SHALL NOT EXPERIENCE MORE THAN 20% CHANGE OF PHOTOMETRIC PARAMETERS, AND SHALL EXHIBIT NO TOXIC OUTGASSING.

2. ACCEPTANCE AND INSPECTION: SAMPLE

- MARKING AND PREPARATION FOR DELIVERY AS SPECIFIED ABOVE AND IN TABLE I.
- DIMENSIONS AND TOLERANCES AS SPECIFIED HEREIN.
- LIGHT DISTRIBUTION THROUGH MARKING: 33% MINIMUM LIGHT TRANSMISSION WHEN BACKLIGHTED WITH AN EL LAMP PER SCD 1006340 LOCATED DIRECTLY BEHIND THE BACK SURFACE OF THE CAP.
- VENDOR SUPPLIED DATA: EACH SHIPMENT OF PARTS SHALL BE ACCOMPANIED BY THE FOLLOWING DOCUMENTATION.
 - A CERTIFICATE OF COMPLIANCE WITH THE MATERIAL REQUIREMENTS SPECIFIED HEREIN.
 - A CERTIFICATE OF COMPLIANCE WITH MIL-Q-9858.

3. DESIGN:

- MATERIAL: ACRYLIC PER MIL-P-5425, FINISH A.
- FINISH: BACKGROUND SHALL BE TT-E-527 BLACK LUSTERLESS ENAMEL COLOR NO. 37038 PER FED-STD-595. ENGRAVED CHARACTERS, NON-ILLUMINATED, TO APPEAR WHITE COLOR NO. 37075 PER FED-STD-595.
- MARKINGS PER TABLE I SHALL BE ENGRAVED THROUGH BLACK PAINT ONLY PER ND 1002019 AND ND 1002122 TYPE II, CLASS 1. THIS NOTE ONLY APPLIES IF ENGRAVING IS USED.
- COLOR: WHEN BACKLIGHTED PER 2.C., COLOR SHALL BE WHITE, WITH COLOR COORDINATES $X = .330 \pm .030$, $Y = .330 \pm .030$ PER CIE CHROMACITY DIAGRAM.

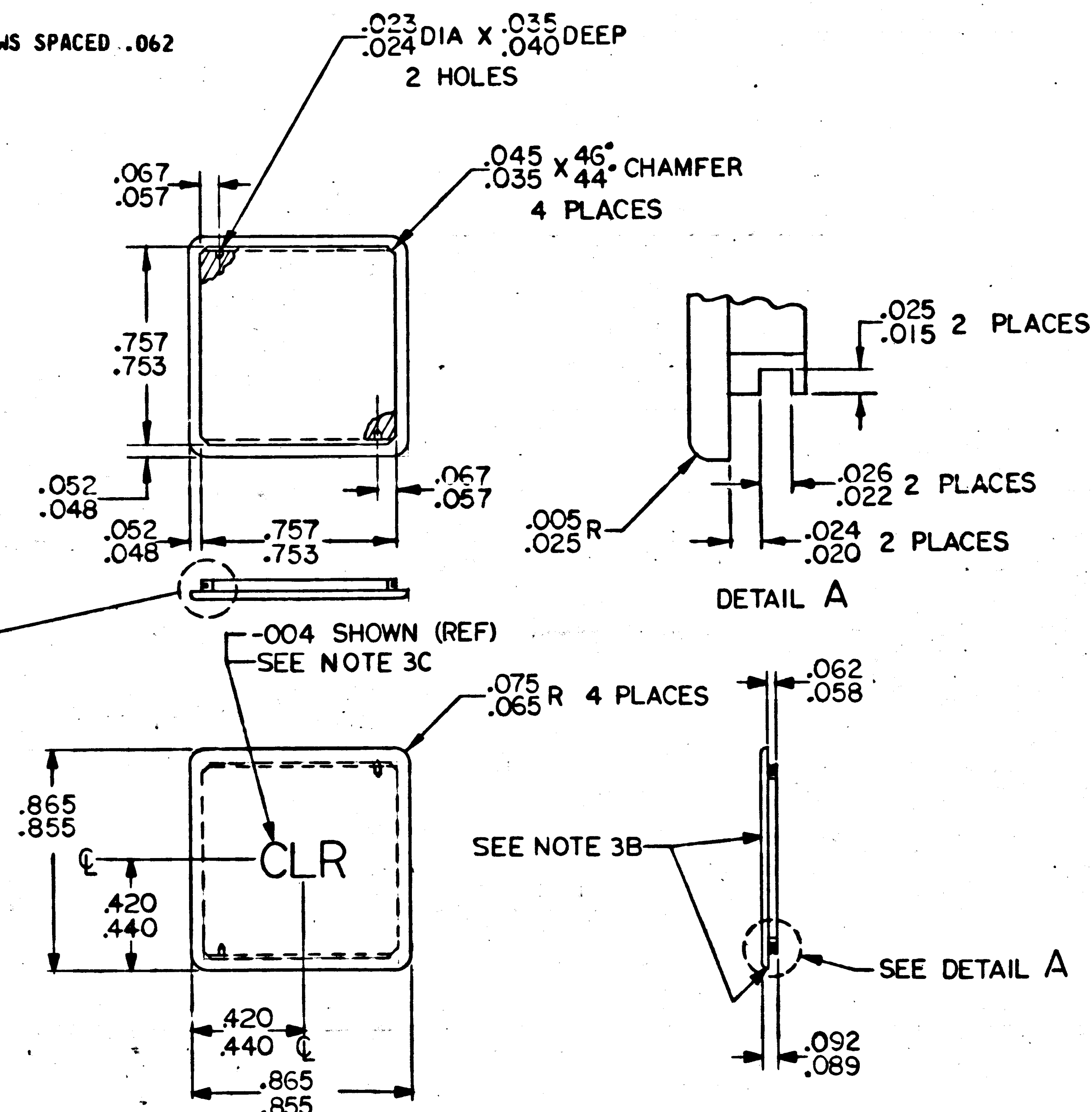
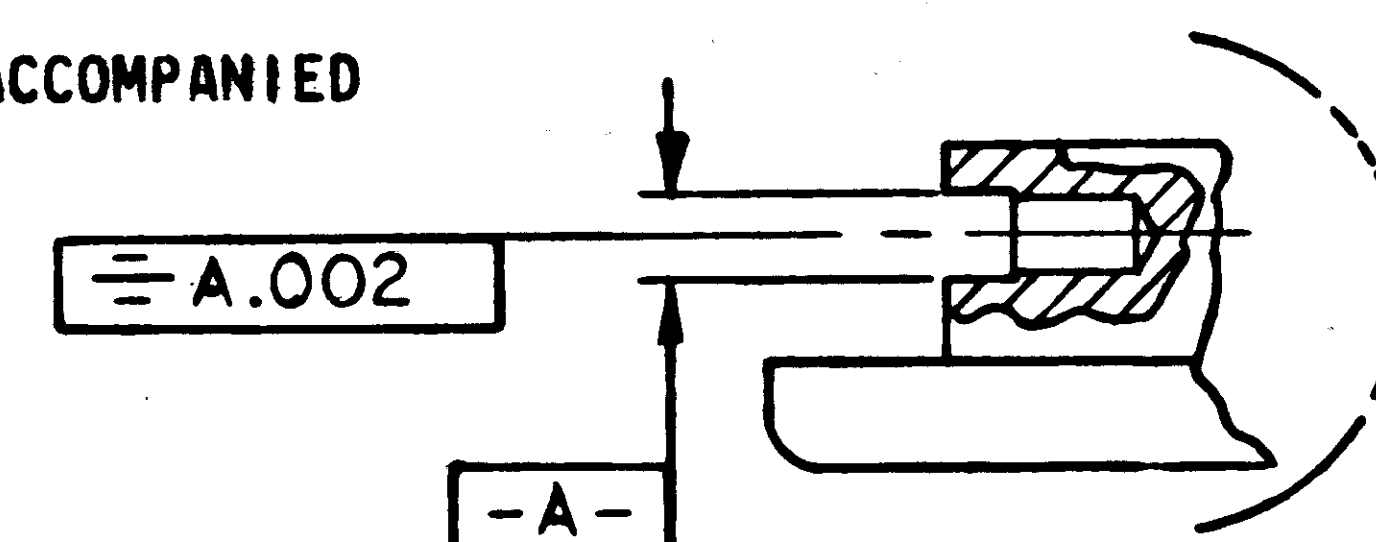
- GLOSS: SHALL NOT EXCEED 5 UNITS ON EXTERIOR SURFACES, AS MEASURED PER ASTM METHOD D523.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 1002034 FOR THIS DRAWING.

TABLE I

DASH NO.	MARKING	HEIGHT
-001	VERB	.125
-002	NOUN	
-003	ENTR	
-004	CLR	
-005	STBY	
-006	KEY REL	
-007	RSET	.125
-008	+	.250
-009	-	
-010	0	
-011	1	
-012	2	
-013	3	
-014	4	
-015	5	
-016	6	
-017	7	
-018	8	
-019	9	.250

2 ROWS SPACED .062



QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND. NO.
LIST OF MATERIALS				
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS		
DRAWN <i>J. Doty</i> 10/15/65		CAP, ELECTRICAL, ENGRAVED		
CHECKED <i>J. B. ...</i> 10/15/65		SPECIFICATION CONTROL DRAWING		
APPROVED <i>Edna C. Hall</i> 10/15/65				
APPROVED MIT <i>W. K. ...</i> 10/15/65		CODE IDENT NO. 80230	SIZE C	DRAWING NO. 1006353
NOT REQUIRED PER LETTER MSO-ISA PP-65-512		DATE	SCALE NONE	SHEET 1 OF 1

SEE NOTE

NOTICE - WHEN GOVERNMENT DRAWINGS, SPECIFICATIONS, OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE UNITED STATES GOVERNMENT THEREBY INCURS NO RESPONSIBILITY NOR ANY OBLIGATION WHATSOEVER, AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE, OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

REQUIREMENTS:

1. GENERAL:

- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS AS CONTAINED IN MIL-Q-9858.
- MARKING: UNITS SHALL BE MARKED PER ND 1002019 WITH THE NASA PART NUMBER (DRAWING NUMBER, REVISION LETTER AND DASH NUMBER).
- PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH ND 1002215 CLASS I, CODE 3.
 - MARKING OF SHIPPING CONTAINERS SHALL CONFORM TO THE MARKING OF UNIT AND INTERMEDIATE PACKAGES AND METHODS OF MARKING AS SPECIFIED IN ND 1002215.
- WHEN SUBJECTED TO THE ENVIRONMENTAL REQUIREMENTS OF ND 1002056, UNITS SHALL NOT EXPERIENCE MORE THAN 20% CHANGE OF PHOTOMETRIC PARAMETERS, AND SHALL EXHIBIT NO TOXIC OUTGASSING.

2. ACCEPTANCE AND INSPECTION: SAMPLE

- MARKING AND PREPARATION FOR DELIVERY AS SPECIFIED ABOVE AND IN TABLE I.
- DIMENSIONS AND TOLERANCES AS SPECIFIED HEREIN.
- LIGHT DISTRIBUTION THROUGH MARKING: 33% MINIMUM LIGHT TRANSMISSION WHEN BACKLIGHTED WITH AN EL LAMP PER SCD 1006340 LOCATED DIRECTLY BEHIND THE BACK SURFACE OF THE CAP.
- VENDOR SUPPLIED DATA: EACH SHIPMENT OF PARTS SHALL BE ACCOMPANIED BY THE FOLLOWING DOCUMENTATION.
 - A CERTIFICATE OF COMPLIANCE WITH THE MATERIAL REQUIREMENTS SPECIFIED HEREIN.
 - A CERTIFICATE OF COMPLIANCE WITH MIL-Q-9858.

3. DESIGN:

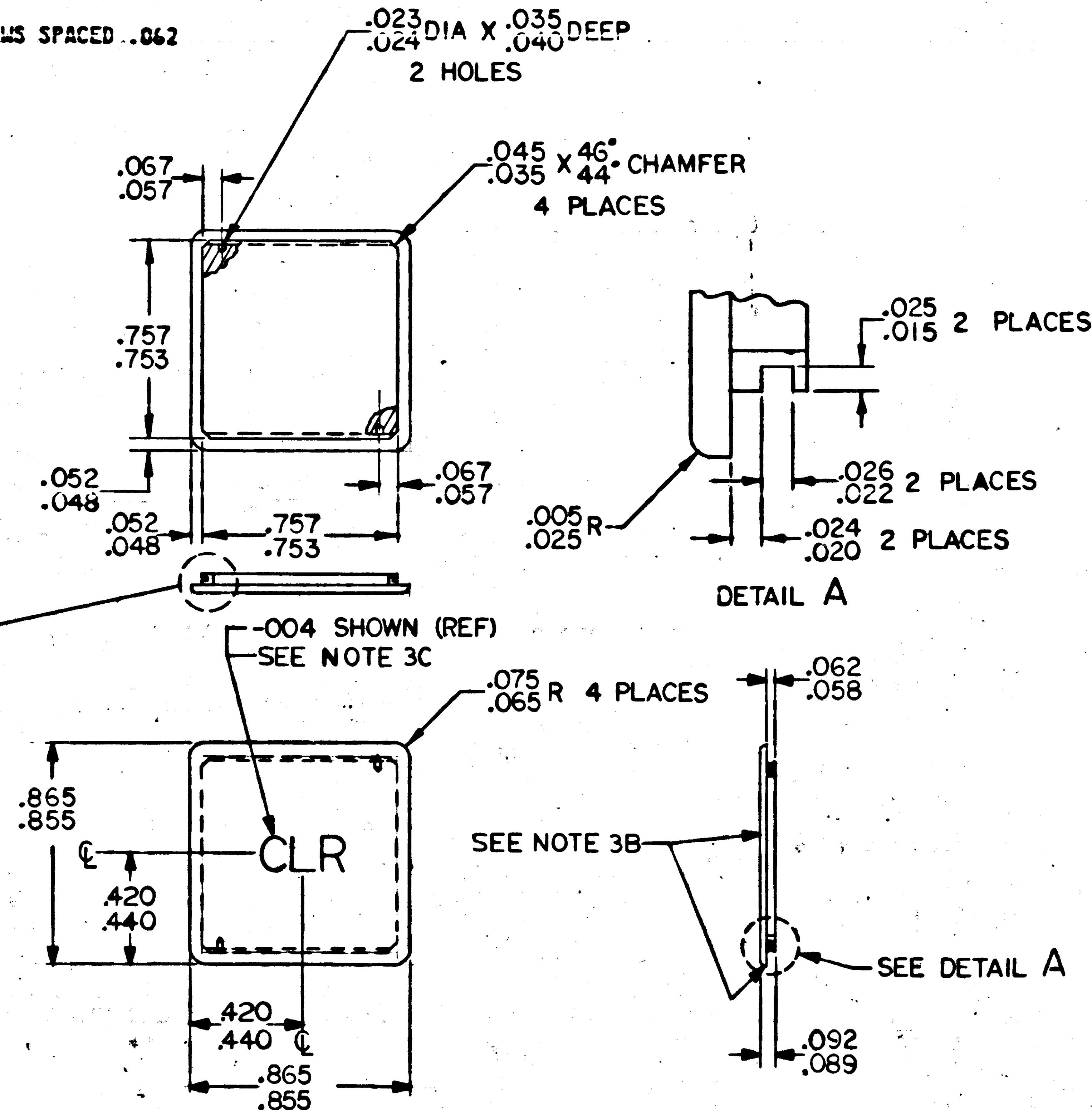
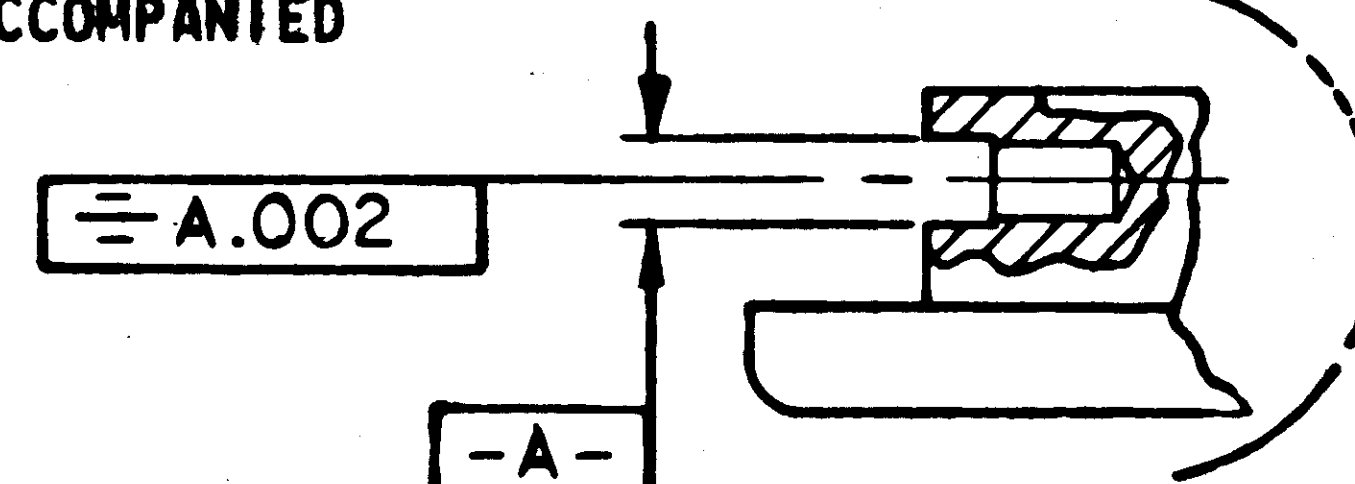
- MATERIAL: ACRYLIC PER MIL-P-5425, FINISH A.
- FINISH: BACKGROUND SHALL BE TT-E-527 BLACK LUSTERLESS ENAMEL OR EPOXY COLOR NO. 37038 PER FED-STD-595. ENGRAVED CHARACTERS, NON-ILLUMINATED, TO APPEAR WHITE COLOR NO. 37075 PER FED-STD-595.
- MARKINGS: PER TABLE I SHALL BE GORTON NORMAL WITH OR PAINT
 - PROPORTIONS PER ND 1002122 TYPE II, CLASS 1 EXCEPT AS NOTED:
 - CHARACTER HEIGHT TO BE MEASURED AS OVERALL HEIGHT.
 - LINE STROKE WIDTH TO BE .030 FOR .250 HIGH CHARACTERS.
 - LINE STROKE WIDTH TO BE .022 FOR .125 HIGH CHARACTERS.
 - FUTURA DEMIBOLD MARKINGS PER ND 1002122 SHALL ALSO BE ACCEPTABLE. THESE SHALL BE MODIFIED TO HAVE STROKE WIDTHS AS IN 3C1.
- COLOR: WHEN BACKLIGHTED PER 2.C., COLOR SHALL BE WHITE, WITH COLOR COORDINATES $X = .330 \pm .030$, $Y = .330 \pm .030$, PER CIE CHROMACITY DIAGRAM.
- CONTRAST: WHITE COLOR IN 3B MAY BE REDUCED IN SATURATION PROVIDED A MINIMUM CONTRAST OF 5 UNITS BETWEEN BLACK BACKGROUND AND UNLIGHTED CHARACTER WHEN MEASURED IN ACCORDANCE WITH MIL-P-7788. FOR CONTRAST MEASUREMENT THE CAP MAY BE BACKED WITH AN EL LAMP PER SCD 1006340 SPACED 0.2 INCHES AWAY.
- GLOSS: SHALL NOT EXCEED 5 UNITS ON EXTERIOR SURFACES, AS MEASURED PER ASTM METHOD D523.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 1002034 FOR THIS DRAWING.

TABLE I

DASH NO.	MARKING	HEIGHT
-001	VERB	.125
-002	NOUN	
-003	ENTR	
-004	CLR	
-005	STBY	
-006	KEY REL	
-007	RSET	.125
-008	+	.250
-009	-	
-010	0	
-011	1	
-012	2	
-013	3	
-014	4	
-015	5	
-016	6	
-017	7	
-018	8	
-019	9	.250

2 ROWS SPACED .062



QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FIND. NO.
LIST OF MATERIALS				
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS		
DRAWN <i>J. R. Rags</i> 10/15/15		CAP, ELECTRICAL, ENGRAVED		
CHECKED <i>J. R. Rags</i> 10/15/15		SPECIFICATION CONTROL DRAWING		
APPROVED <i>E. C. Hall</i> 10/15/15		DRAWING NO. 1006353		
APPROVED <i>W. J. Rags</i> 10/15/15		CODE IDENT NO. 80230 C		
NOT REQUIRED PER LETTER MS0/ISA PP7-65-612		SHEET 1 OF 1		

SEE NOTE

REQUIREMENTS:

1. GENERAL:

- A. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327.
- B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS AS CONTAINED IN MIL-Q-9858.
- C. MARKING: UNITS SHALL BE MARKED PER ND 1002019 WITH THE NASA PART NUMBER (DRAWING NUMBER, REVISION LETTER AND DASH NUMBER).

- D. PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH ND 1002215 CLASS I, CODE 3.

- (1) MARKING OF SHIPPING CONTAINERS SHALL CONFORM TO THE MARKING OF UNIT AND INTERMEDIATE PACKAGES AND METHODS OF MARKING AS SPECIFIED IN ND 1002215.

- E. WHEN SUBJECTED TO THE ENVIRONMENTAL REQUIREMENTS OF ND 1002056, UNITS SHALL NOT EXPERIENCE MORE THAN 20% CHANGE OF PHOTOMETRIC PARAMETERS, AND SHALL EXHIBIT NO TOXIC OUTGASSING.

2. ACCEPTANCE AND INSPECTION: SAMPLE

- A. MARKING AND PREPARATION FOR DELIVERY AS SPECIFIED ABOVE AND IN TABLE I.

- B. DIMENSIONS AND TOLERANCES AS SPECIFIED HEREIN.**

- C. LIGHT DISTRIBUTION THROUGH MARKING: 33% MINIMUM LIGHT TRANSMISSION WHEN BACKLIGHTED WITH AN EL LAMP PER SCD 1006340 LOCATED DIRECTLY BEHIND THE BACK SURFACE OF THE CAP.

- D. VENDOR SUPPLIED DATA: EACH SHIPMENT OF PARTS SHALL BE ACCOMPANIED BY THE FOLLOWING DOCUMENTATION.

- (1) A CERTIFICATE OF COMPLIANCE WITH THE MATERIAL REQUIREMENTS SPECIFIED HEREIN.
- (2) A CERTIFICATE OF COMPLIANCE WITH MIL-Q-9858.

3. DESIGN:

- A. MATERIAL: ACRYLIC PER MIL-P-5425, FINISH A.

- B. FINISH: BACKGROUND SHALL BE TT-E-527 BLACK LUSTERLESS ENAMEL OR EPOXY COLOR NO. 37038 PER FED-STD-595. CHARACTERS, NON-ILLUMINATED, TO APPEAR WHITE COLOR NO. 37875 PER FED-STD-595.

- C. MARKINGS: PER TABLE 1 SHALL BE GORTON NORMAL WITH
1. PROPORTIONS PER ND 1002122 TYPE II, CLASS 1 EXCEPT AS NOTED:
 - a) CHARACTER HEIGHT TO BE MEASURED AS OVERALL HEIGHT.
 - b) LINE STROKE WIDTH TO BE .030 FOR .125 HIGH CHARACTERS.
 - c) LINE STROKE WIDTH TO BE .022 FOR .125 HIGH CHARACTERS.

2. FUTURA DEMIBOLD MARKINGS PER ND 1002122 SHALL ALSO BE ACCEPTABLE. THESE SHALL BE MODIFIED TO HAVE STROKE WIDTHS AS IN 3C1.

- D. COLOR: WHEN BACKLIGHTED PER 2.C., COLOR SHALL BE WHITE, WITH COLOR COORDINATES $X = .330 \pm .030$, $Y = .330 \pm .030$, PER CIE CHROMACITY DIAGRAM.

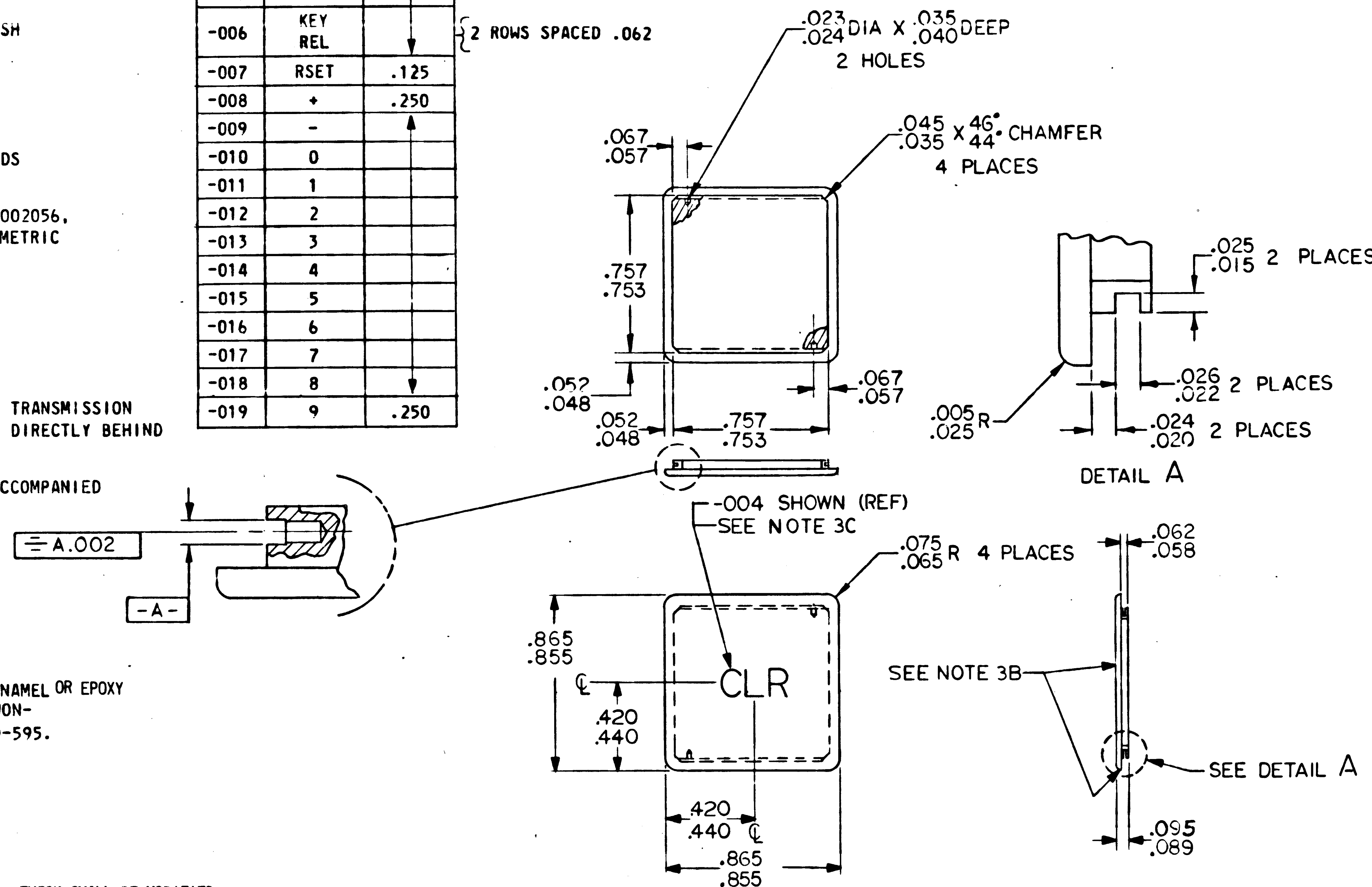
- E. CONTRAST: WHITE COLOR IN 3B MAY BE REDUCED IN SATURATION PROVIDED A MINIMUM CONTRAST OF 5 UNITS BETWEEN BLACK BACKGROUND AND UNLIGHTED CHARACTER WHEN MEASURED IN ACCORDANCE WITH MIL-P-7788. FOR CONTRAST MEASUREMENT THE CAP MAY BE BACKED WITH AN EL LAMP PER SCD 1006340 SPACED 0.2 INCHES AWAY.

- F. GLOSS: SHALL NOT EXCEED 5 UNITS ON EXTERIOR SURFACES, AS MEASURED PER ASTM METHOD D523.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 1002034
FOR THIS DRAWING.

TABLE I

DASH NO.	MARKING	HEIGHT
-001	VERB	.125
-002	NOUN	↑
-003	ENTR	
-004	CLR	
-005	STBY	
-006	KEY REL	
-007	RSET	.125
-008	+	.250
-009	-	↑
-010	0	
-011	1	
-012	2	
-013	3	
-014	4	↓
-015	5	
-016	6	
-017	7	
-018	8	
-019	9	.250



REVISIONS						
SYM	ZONE	DESCRIPTION	DR	CHK	DATE	APPROVED
—		INITIAL RELEASE CLASS A PERTDRR 22269			9-8-65	WK
A		REVISED PER TDRR 23458			11/9/65	WK
B		REVISED PER TDRR 29902	RWH	11/13/66	13 JUL 66	

NEXT ASSY	USED ON
APPLICATION	

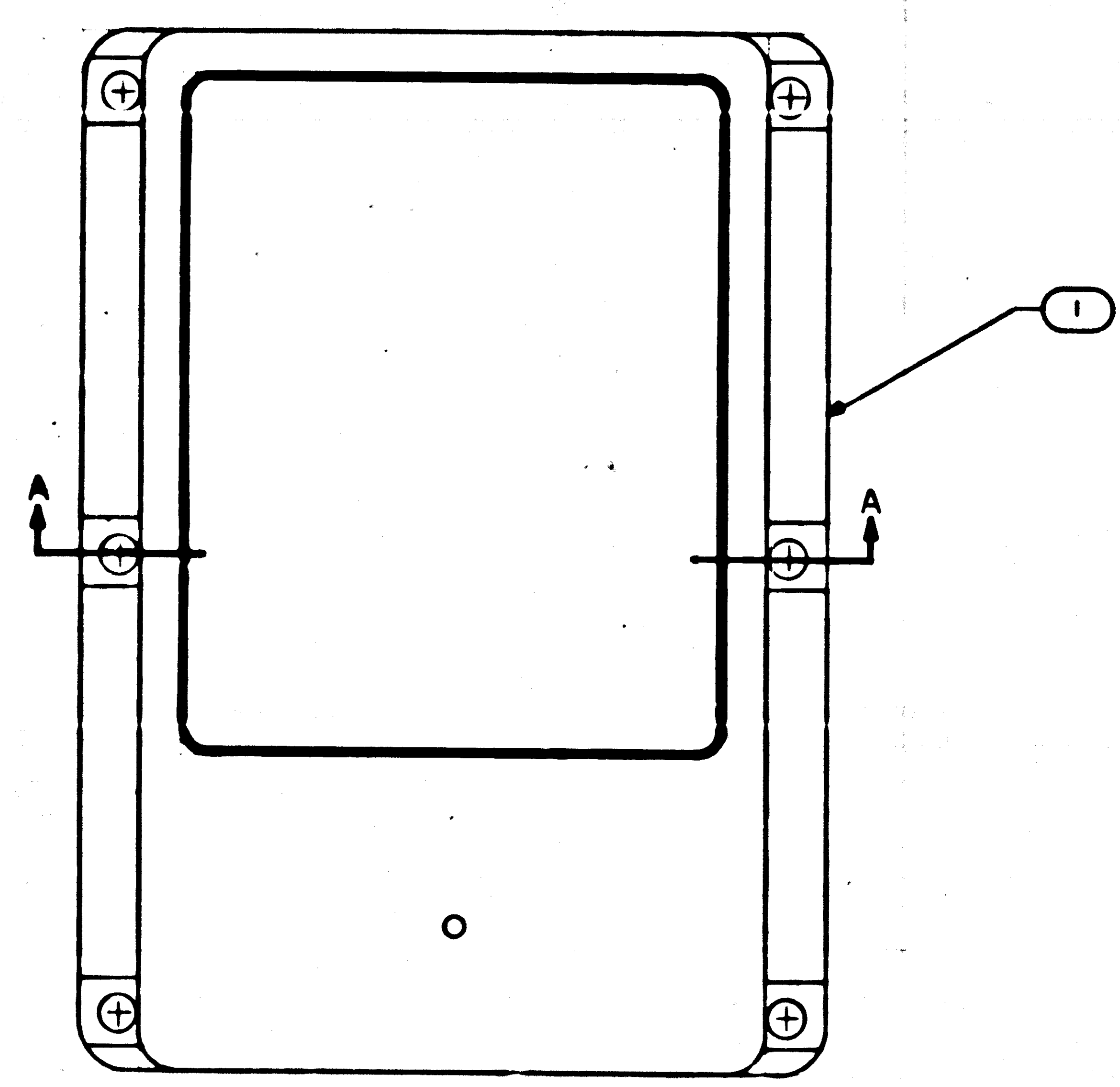
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN μf
RESISTOR VALUES ARE IN OHMS
TOLERANCES ON
FRACTIONS DECIMALS ANGLES
 \pm \pm \pm
DO NOT SCALE THIS DRAWING
MATERIAL

SEE NOTE

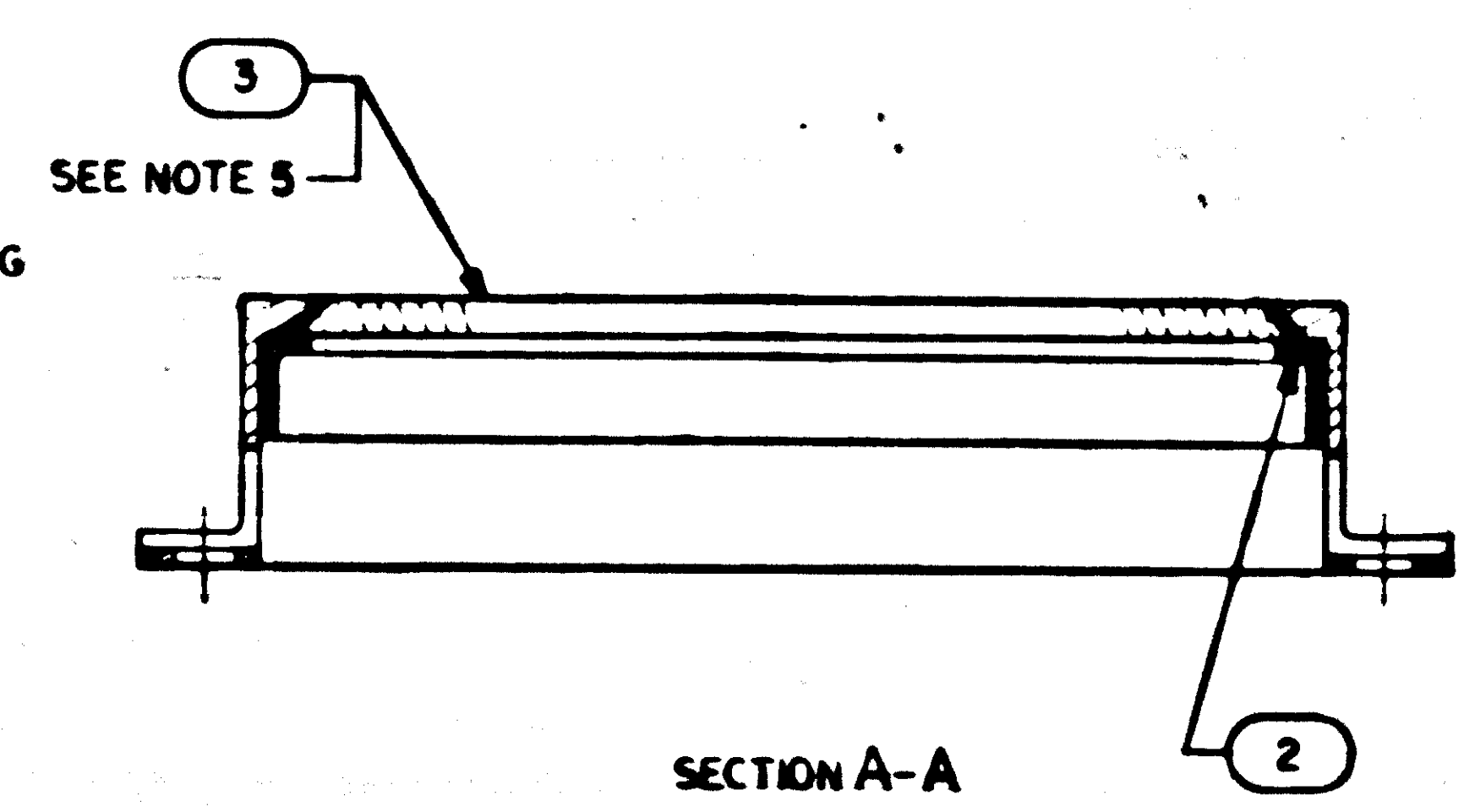
QTY REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION		FIN NO.
LIST OF MATERIALS					
MIT INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS			
DRAWN	<i>J. R. Rupp</i>	<i>11/15/1965</i>	CAP, ELECTRICAL, ENGRAVED		
CHECKED	<i>G. Rupp</i>	<i>11/16/1965</i>			
APPROVED					
APPROVED	<i>Edwin C. Hall</i>	<i>12/1/1965</i>			
SPECIFICATION CONTROL DRAWING					
APPROVED MIT	<i>W. Rupp</i>	<i>11/16/1965</i>	CODE IDENT NO.	SIZE	DRAWING NO.
NOT REVISIONS			80230	C	1006353
APPROVED MSC	<i>11/16/1965</i>	DATE	SCALE	NONE	SHEET
					OF

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
2. IDENTIFY WITH PART NO. PER INDICATED
3. BOND FIND NO. 2 AND FIND NO. 3 TO FIND NO. 1 AS INDICATED USING FIND NO. 4. CURE AT ROOM TEMPERATURE FOR 24 HOURS MIN. PRIME AS REQD USING 1010900
~~4. BOND FIND NO. 2 TO FIND NO. 1 AS INDICATED USING FIND NO. 5. CURE AT ROOM TEMPERATURE FOR 24 HOURS MIN.~~
5. SURFACE OF FIND NO. 3 TO BE FLUSH TO .010 BELOW FACE SURFACE OF FIND NO. 1.

REVISIONS 72635062				
SYM	ZONE	DESCRIPTION	OR	DATE
A		REVISED PER TLRR 35650	1/2/68	1/2/68



- NOTES:
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. IDENTIFY WITH PART NO. PER INDICATED
 3. BOND FIND NO. 2 AND FIND NO. 3 TO FIND NO. 1 AS INDICATED USING FIND NO. 4. CURE AT ROOM TEMPERATURE FOR 24 HOURS MIN. PRIME AS REQD USING 1010900
 - ~~4. BOND FIND NO. 2 TO FIND NO. 1 AS INDICATED USING FIND NO. 5. CURE AT ROOM TEMPERATURE FOR 24 HOURS MIN.~~
 5. SURFACE OF FIND NO. 3 TO BE FLUSH TO .010 BELOW FACE SURFACE OF FIND NO. 1.



SECTION A-A

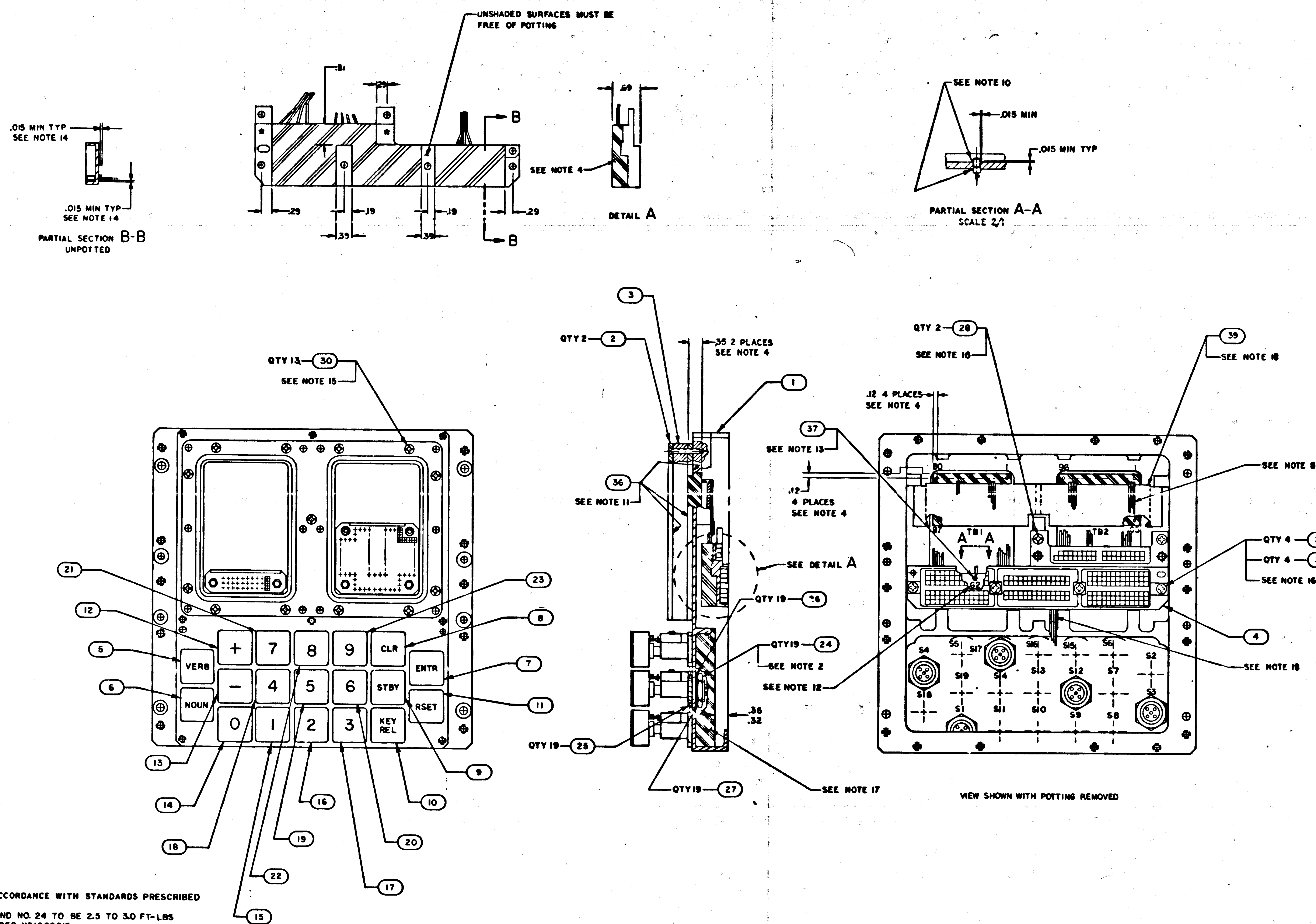
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES CAPACITOR VALUES ARE IN μ RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS DECIMALS ANGLES DO NOT SCALE THIS DRAWING		MIT INSTRUMENTATION LAB CAMBRIDGE MASS		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
DRAWN J. P. Leland		CHECKED J. P. Leland		APPROVED J. P. Leland	
2003699		2003699		2003699	
NEXT ASSY		USED ON		APPLICATION	
DATE		SCALE 2/1		SHEET 1 OF 1	

QTY	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	FINC NO.
1	1006338-002		ADHESIVE SEALING	1
1	2004698		ADHESIVE, SILICONE	4
1	2004141		PANEL, INDICATOR	3
1	2004699		GASKET, INDICATOR COVER	2
1	2004699		FRAME, INDICATOR COVER	1

COVER ASSEMBLY
INDICATOR ALARM
AGC DSKY

CODE IDENT NO 80230
SIZE D
DRAWING NO 2003897

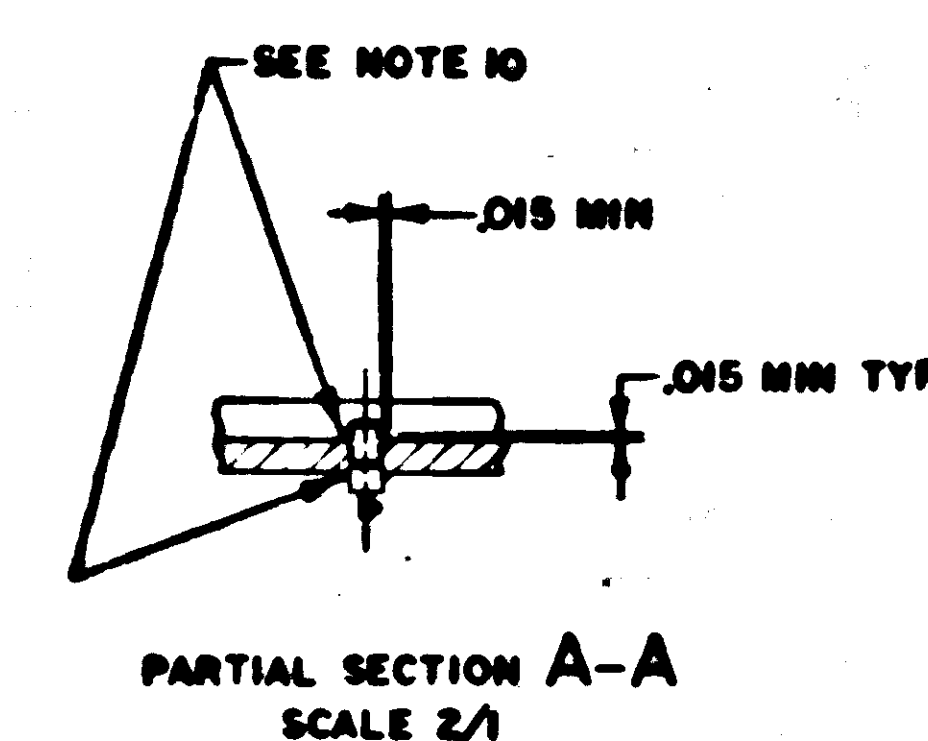
2003897 A



- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MOUNTING TORQUE FOR FIND NO. 24 TO BE 2.5 TO 3.0 FT-LBS
 3. IDENTIFY WITH PART NO. PER NDIO02019
 4. ENCAPSULATE INDICATED AREAS PER NDIO02236
 5. SOLDER PER NDIO02071 USING SOLDER PER NDIO02075
 6. WELD PER NDIO02005
 7. AR DENOTES AS REQUIRED
 8. BOND FIND NO. 32, 33, 58, 40 & 41 TO FIND NO. 39 PER NDIO02004, TYPE II
 9. DRESS AND TRIM AT ASSEMBLY USING FIND NO. 34
 10. SEAL FIND NO. 37 TO FIND NO. 1 PER NDIO02004, TYPE II
 11. APPLY FIND NO. 36 TO INDICATED SURFACES OF FIND NO. 2.
DO NOT APPLY TO BONDED RUBBER
 12. MARK .0710 HIGH BLACK CHARACTERS PER NDIO02019 AND NDIO02122
TYPE II CLASS USING MARKING INK J06271-11
 13. MOUNTING TORQUE FOR FIND NO. 337 TO BE 15-20 INCH OUNCES
 14. SEAL INSULATORS ON FIND NO. 4 PER NDIO02004, TYPE III
 15. MOUNTING TORQUE FOR FIND NO. 50 TO BE 3.5-4.5 INCH POUNDS
 16. MOUNTING TORQUE FOR FIND NO. 28 AND FIND NO. 29 TO BE 6 TO 9 INCH POUNDS
 17. ENCAPSULATE PER MD
 18. BOND FIND NO. 39 & WIRES FROM 31 THRU 519 TO FIND NO. 1 PER NDIO02004, TYPE II

✖	2005953	INTERCONNECTING DIAGRAM	RE
AR	1010807-22	WIRE, INSULATED	41
AR	1010416-14	WIRE, INSULATED	40
I	2004898	SUPPORT, WIRE	39
AR	1010416-13	WIRE, INSULATED	38
I	2004039	TERMINAL, THREADED	37
AR	1010679	SILICONE COMPOUND	36
AR	1010416-15	WIRE, INSULATED	35
AR	1012507-003	TAPE, LACING	34
AR	1010416-20	WIRE, INSULATED	33
AR	1010848-1	WIRE, INSULATED	32
4	NAS620-6L	WASHER, FLAT	31
I	MS3183-20	SCREW, FLAT HD, CROSS RECESSED	30
I	MS1957-30	SCREW, PAN HD, CROSS RECESSED	29
2	MS1959-28	SCREW, FLAT HD, CROSS RECESSED	28
19	1010635-003	WASHER, LOCK	27
20	2004940-001	WASHER, PLAIN	26
19	1000159-18	O RING SEAL	25
19	2004942	NUT, HEX	24
1	2003984-211	SWITCH, ASSEMBLY PUSHBUTTON	23
I	-131		22
I	-181		21
I	-171		20
I	-161		19
I	-151		18
I	-141		17
I	-131		16
I	-121		15
I	-111		14
I	-091		13
I	-081		12
I	-071		11
I	-061		10
I	-051		9
I	-041		8
I	-031		7
I	-021		6
I	-011		5
I	2003984-011	SWITCH, ASSEMBLY PUSHBUTTON	4
I	2003948-011	CONNECTOR, PLATE ASSEMBLY	3
I	200359-011	ADAPTER, PLATE ASSEMBLY	2
2	K06351	GASKET, PREFORMED	1
	2004368-011	HOUSING, FRONT	
TTY	PART OF IDENTIFYING REL	NUMERICAL OR DESCRIPTION	FORM NO

		011		LINE OF MATERIALS	
		M I T INSTRUMENTATION LAB JANUARY 1968		MANNED SPACECRAFT CENTER WASHINGTON FIELD	
		DESIGNED BY <u>J. E. B. [Signature]</u> FOR <u>AS</u> CHECKED BY <u>[Signature]</u> DATE <u>1/11/68</u> APPROVED BY <u>[Signature]</u> FOR <u>FEAL</u> APPROVED BY <u>[Signature]</u> FOR <u>INSTR</u>		FRONT HOUSING ASSEMBLY	
				AGC DSKY	
2003950		APPROVED BY <u>[Signature]</u> FOR <u>INSTR</u> DATE <u>1/11/68</u>		DRAWING NO. 2003949	
NEXT ASBY		USED ON		80230 J	
APPLICATION		DATE		SHEET 1 OF 1	

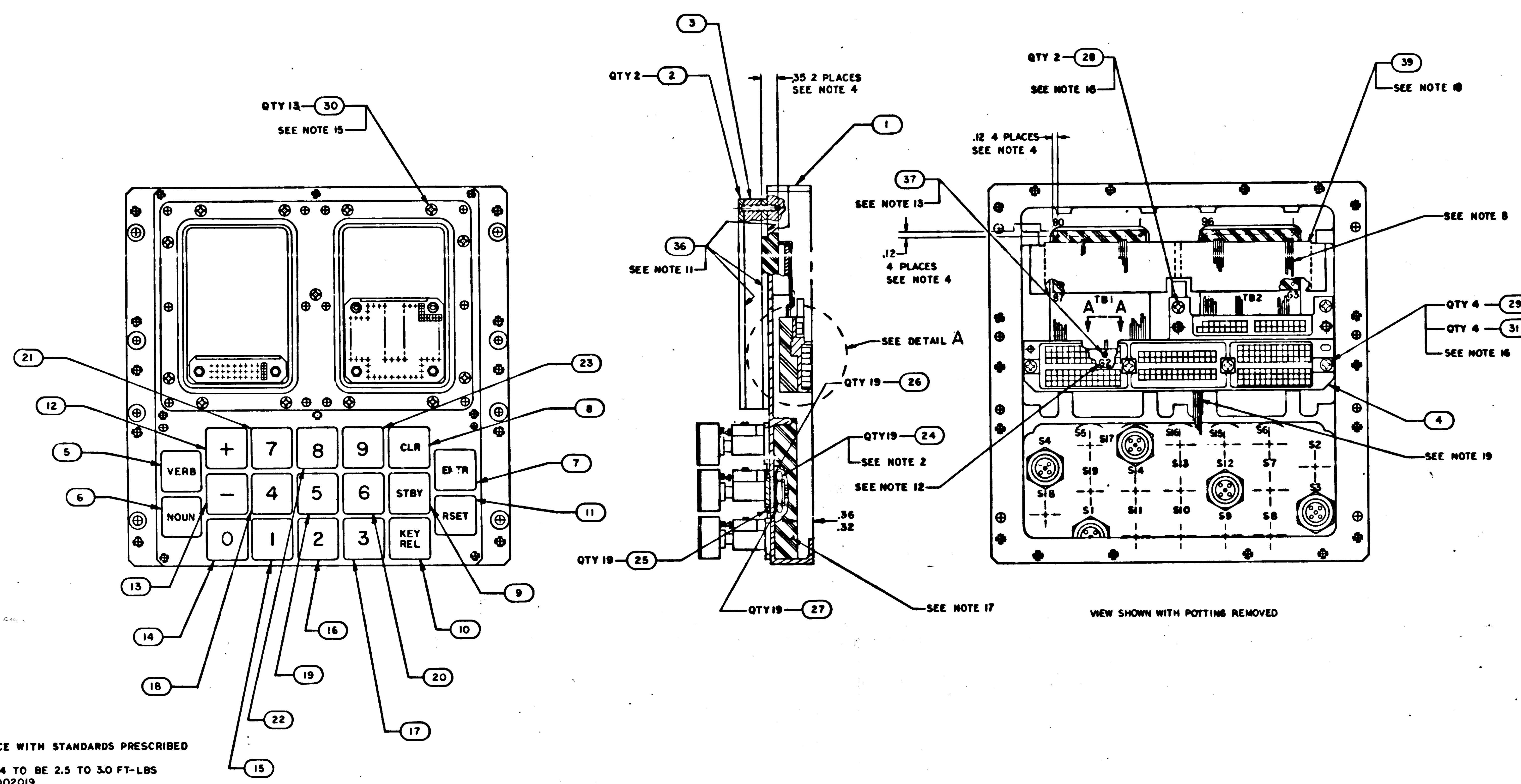
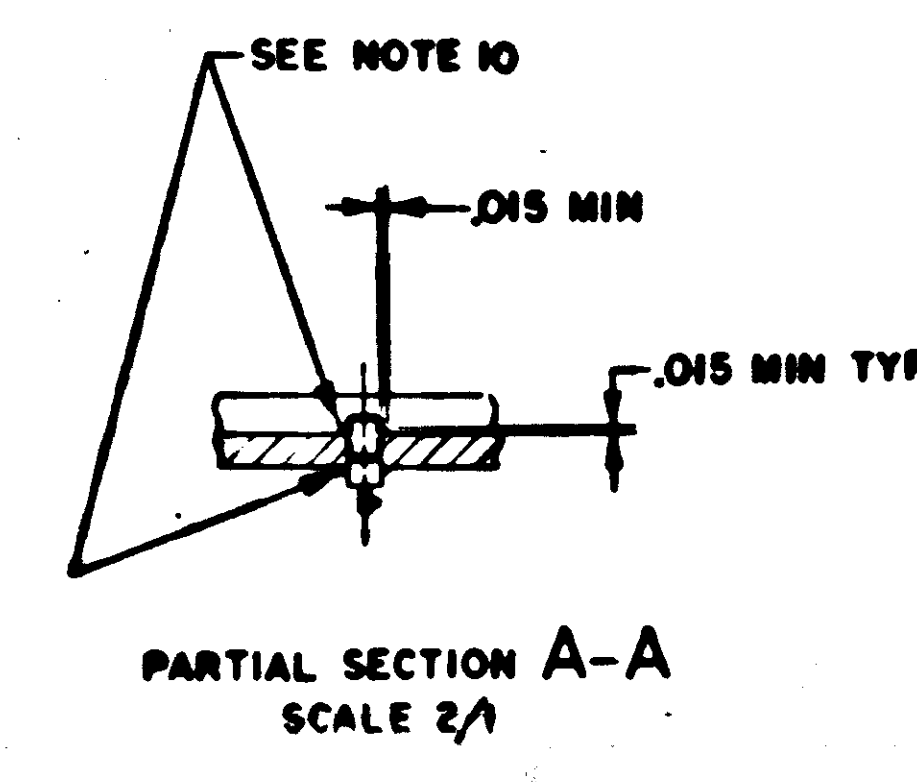
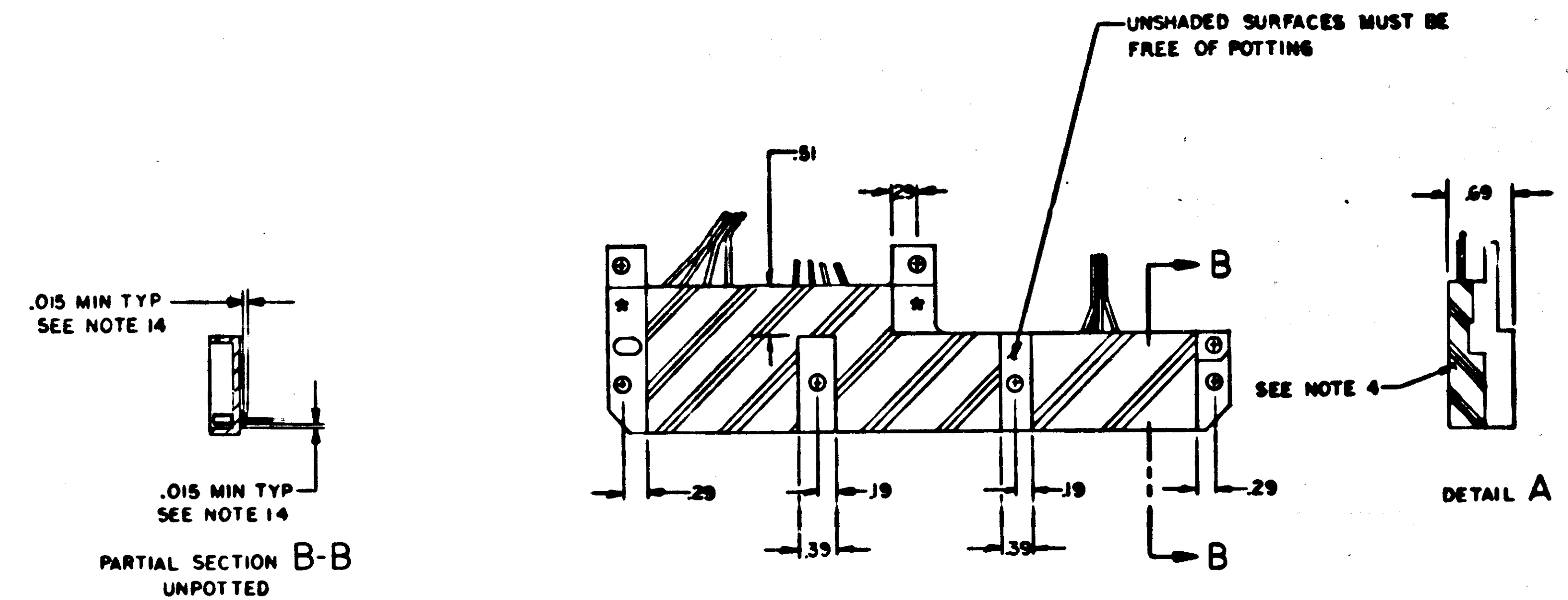


- NOTES**
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MOUNTING TORQUE FOR FIND NO. 24 TO BE 2.5 TO 3.0 FT-LBS
 3. IDENTIFY WITH PART NO. PER NDIO02019
 4. ENCAPSULATE INDICATED AREAS PER NDIO02236
 5. SOLDER PER NDIO02071 USING SOLDER PER NDIO02075
 6. WELD PER NDIO02005
 7. AR DENOTES AS REQUIRED
 8. BOND FIND NO. 32, 33, 36, 40 & 41 TO FIND NO. 39 PER NDIO02009, METHOD C
 9. DRESS AND TRIM AT ASSEMBLY USING FIND NO. 34
 10. SEAL FIND NO. 37 TO FIND NO. 1 PER NDIO02004 TYPE XX
 11. APPLY FIND NO. 36 TO INDICATED SURFACES OF FIND NO. 2. DO NOT APPLY TO BONDED RUBBER
 12. MARK .07/00 DRAWN BLACK CHARACTERS PER NDIO02019 AND NDIO02122 TYPE II, CLASS 2, USING MARKING INK 1006271-1
 13. MOUNTING TORQUE FOR FIND NO. 37 TO BE 15-20 INCH OUNCES
 14. SEAL INSULATORS ON FIND NO. 4 PER NDIO02004 TYPE XX
 15. MOUNTING TORQUE FOR FIND NO. 30 TO BE 3.5-4.5 INCH POUNDS
 16. MOUNTING TORQUE FOR FIND NO. 28 AND FIND NO. 29 TO BE 8 TO 9 INCH POUNDS
 17. ENCAPSULATE INDICATED AREA PER NDIO02295
 18. BOND FIND NO. 39 TO FIND NO. 1 PER NDIO02004, TYPE XX
 19. BOND FIND NO. 33, 38 AND 40 TO FIND NO. 1 PER NDIO02009, METHOD C

✕	2005953	INTERCONNECTING DIAGRAM	
AR	1010807-22	WIRE, INSULATED	
AR	1010416-14	WIRE, INSULATED	
I	2004898	SUPPORT, WIRE	
AR	1010416-13	WIRE, INSULATED	
I	2004039	TERMINAL, THREADED	
AR	1006879	SILICONE COMPOUND	
AR	1010416-15	WIRE, INSULATED	
AR	1012507-003	TAPE, LACING	
AR	1010416-20	WIRE, INSULATED	
AR	1010848-1	WIRE, INSULATED	
4	NA5620-6L	WASHER, FLAT	
15	MS51959-20	SCREW, FLAT HD, CROSS RECESSED	
MS	357-30	SCREW, PAN HD, CROSS RECESSED	
2	MS51959-28	SCREW, FLAT HD, CROSS RECESSED	
19	1010635-003	WASHER, LOCK	
19	2004940-001	WASHER, PLAIN	
19	1000159-18	O RING SEAL	
19	2004942	NUT, HEX	
I	2003984-211	SWITCH, ASSEMBLY PUSHBUTTON	
I	-191		
I	-18		
I	-171		
I	-161		
I	-151		
I	-141		
I	-131		
I	-121		
I	-111		
I	-091		
I	-081		
I	-071		
I	-061		
I	-051		
I	-041		
I	-031		
I	-021		
I	2003984-011	SWITCH, ASSEMBLY PUSHBUTTON	
I	2003948-011	CONNECTOR, PLATE ASSEMBLY	
I	2003939-011	ADAPTER, PLATE ASSEMBLY	
2	1006331	GASKET, PREFORMED	
I	2004968-011	HOUSING, FRONT	
QTY REQD	PART OF IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	

[illegible]

REVISIONS				
NO.	DATE	DESCRIPTION	BY	CHK
A	10/1/66	REVISED PER TDRR 26856	WPT	WPT
B	10/1/66	REVISED PER TDRR 27913	WPT	WPT
C	10/1/66	REVISED PER TDRR 28178	WPT	WPT

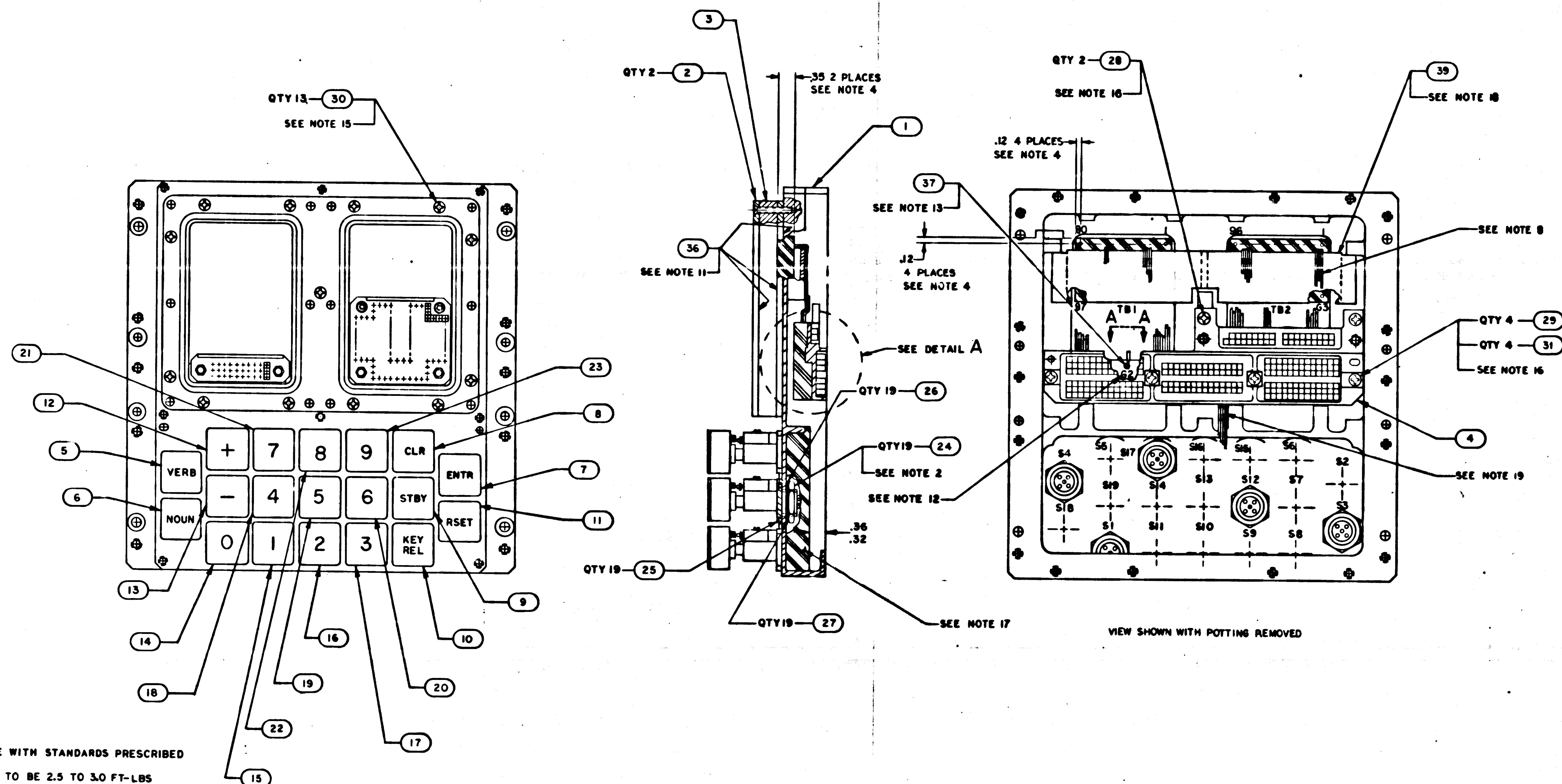
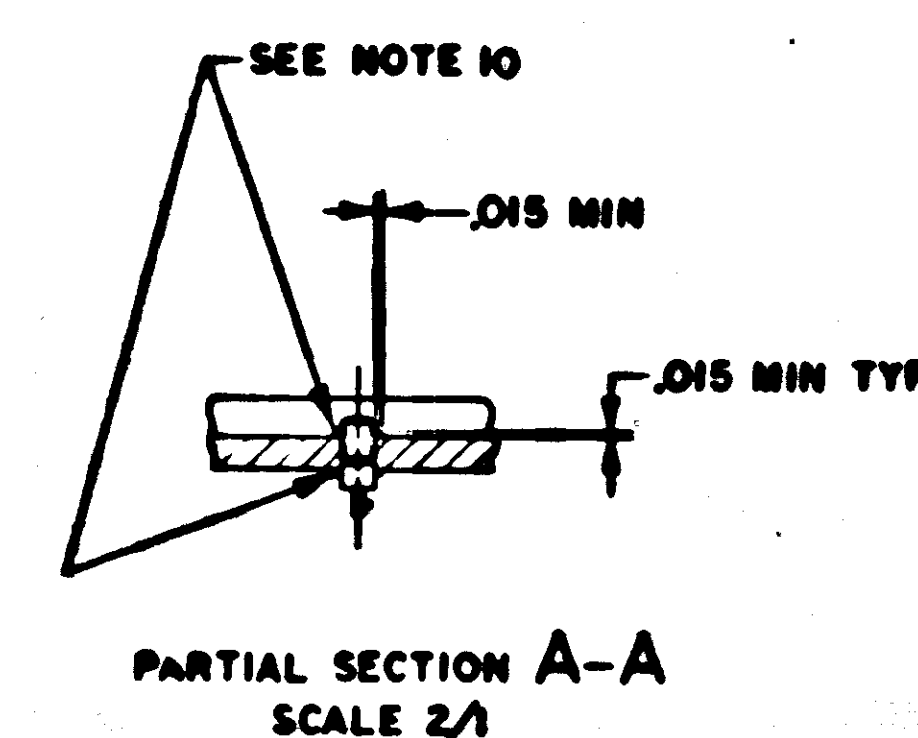
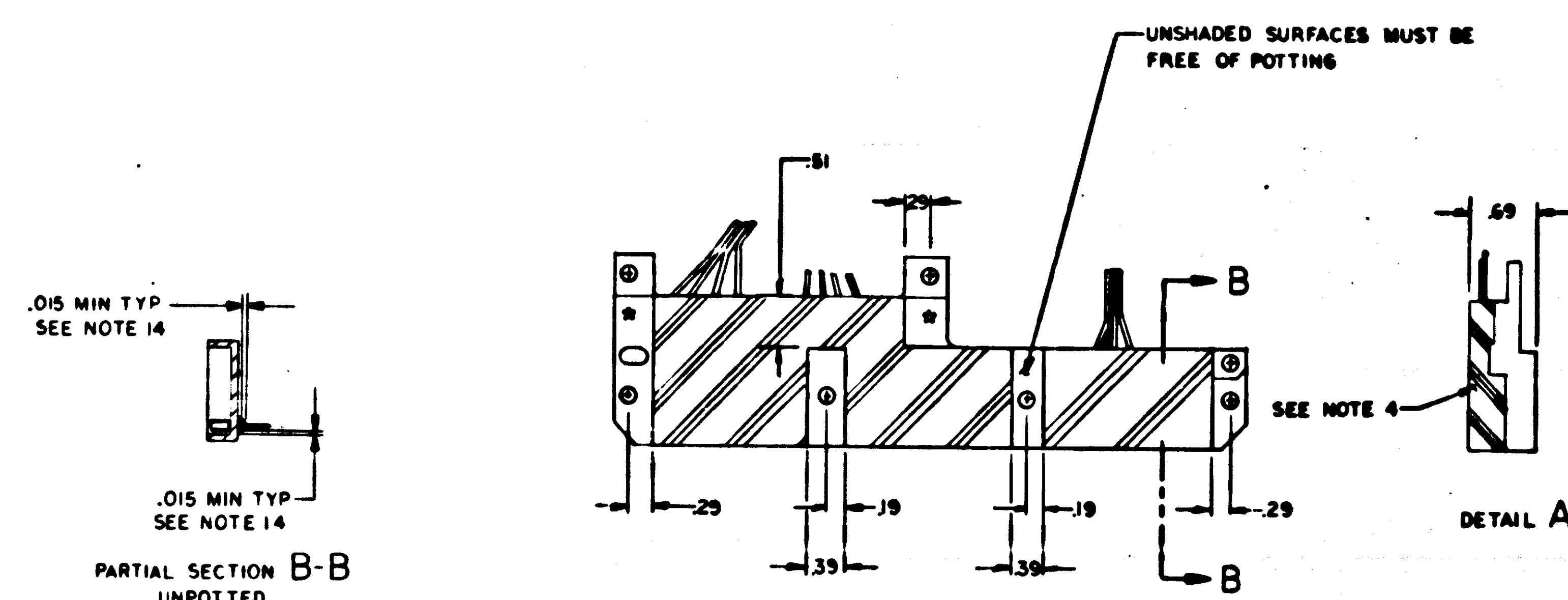


- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MOUNTING TORQUE FOR FIND NO. 24 TO BE 2.5 TO 3.0 FT-LBS
 3. IDENTIFY WITH PART NO. PER ND1002019
 4. ENCAPSULATE INDICATED AREAS PER ND1002236
 5. SOLDER PER ND1002071 USING SOLDER PER ND1002075
 6. WELD PER ND1002005
 7. AR DENOTES AS REQUIRED
 8. BOND FIND NO. 32, 33, 38, 40 & 41 TO FIND NO. 39 PER ND1002009, METHOD C
 9. DRESS AND TRIM AT ASSEMBLY USING FIND NO. 34
 10. SEAL FIND NO. 37 TO FIND NO. 1 PER ND1002004 TYPE III
 11. APPLY FIND NO. 36 TO INDICATED SURFACES OF FIND NO. 2. DO NOT APPLY TO BONDED RUBBER
 12. MARK .07/10 HIGH BLACK CHARACTERS PER ND1002019 AND ND1002122 TYPE II CLASS 2, USING MARKING INK 1006271-11
 13. MOUNTING TORQUE FOR FIND NO. 37 TO BE 15-20 INCH OUNCES
 14. SEAL INSULATORS ON FIND NO. 4 PER ND1002004 TYPE III
 15. MOUNTING TORQUE FOR FIND NO. 30 TO BE 3.5-4.5 INCH POUNDS
 16. MOUNTING TORQUE FOR FIND NO. 28 AND FIND NO. 29 TO BE 8 TO 9 INCH POUNDS
 17. ENCAPSULATE INDICATED AREA PER ND1002295
 18. BOND FIND NO. 39 TO FIND NO. 1 PER ND1002004, TYPE III
 19. BOND FIND NO. 33, 38 AND 40 TO FIND NO. 1 PER ND1002009, METHOD C

2005953	INTERCONNECTING DIAGRAM	REF
AR 1010807-22	WIRE, INSULATED	41
AR 1010416-14	WIRE, INSULATED	40
I 2004898	SUPPORT, WIRE	39
AR 1010416-13	WIRE, INSULATED	38
I 2004039	TERMINAL, THREADED	37
AR 1006679	SILICONE COMPOUND	36
AR 1010416-15	WIRE, INSULATED	35
AR 1012507-003	TAPE, LACING	34
AR 1010416-20	WIRE, INSULATED	33
AR 1010416-1	WIRE, INSULATED	32
4 NAS620-6L	WASHER, FLAT	31
13 M551959-20	SCREW, FLAT HD, CROSS RECESSED	30
4 M551957-30	SCREW, PAN HD, CROSS RECESSED	29
2 M551959-28	SCREW, FLAT HD, CROSS RECESSED	28
19 1010615-003	WASHER, LOCK	27
19 2004940-001	WASHER, PLAIN	26
19 1006159-18	O RING SEAL	25
19 2004942	NUT, HEX	24
I 2001984-211	SWITCH, ASSEMBLY PUSHBUTTON	23
I -191		22
I -181		21
I -171		20
I -161		19
I -151		18
I -141		17
I -131		16
I -121		15
I -111		14
I -091		13
I -081		12
I -071		11
I -061		10
I -051		9
I -041		8
I -031		7
I -021		6
I -011		5
I 2001984-011	SWITCH, ASSEMBLY PUSHBUTTON	4
I 2003948-011	CONNECTOR, PLATE ASSEMBLY	3
I 2003959-011	ADAPTER, PLATE ASSEMBLY	2
I 1006351	GASKET, PREFORMED	1
I 2004958-021	HOUSING, FRONT	

2003950		2003949	
DATE	10/1/66	DATE	10/1/66
BY	WPT	BY	WPT
CHK	WPT	CHK	WPT
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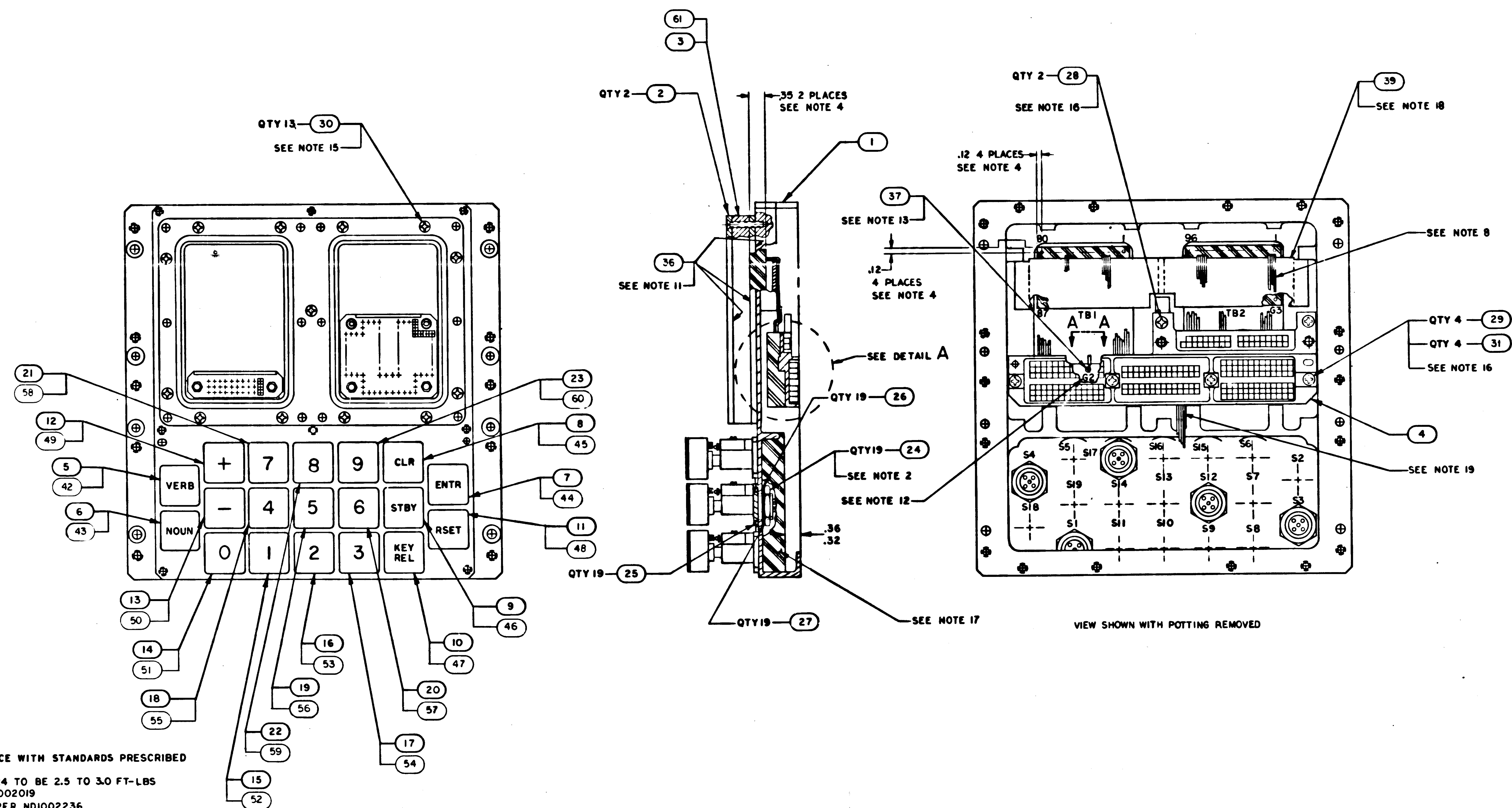
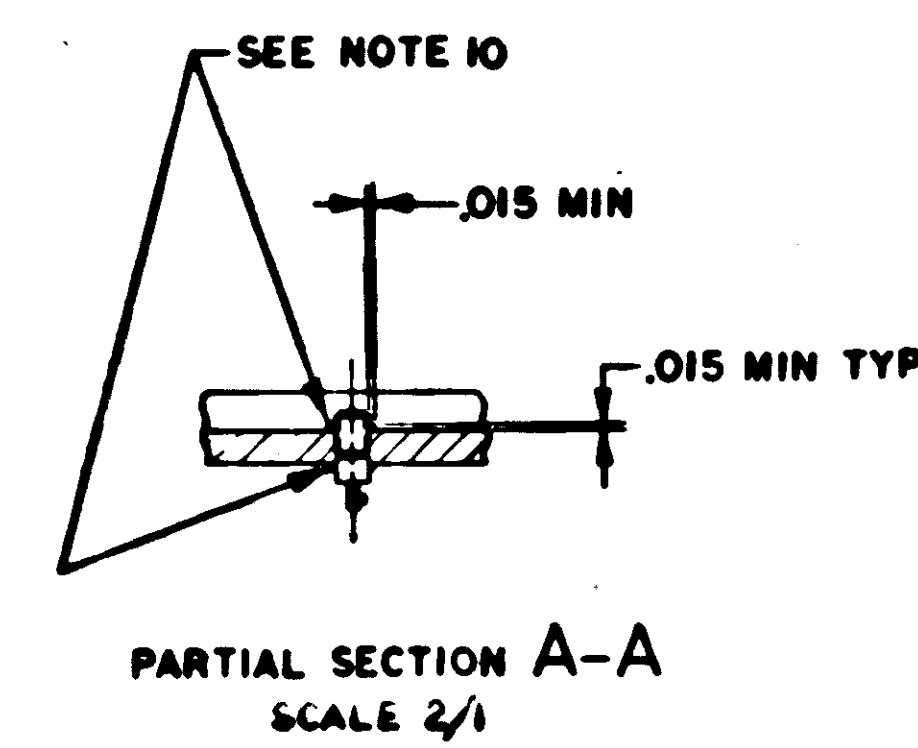
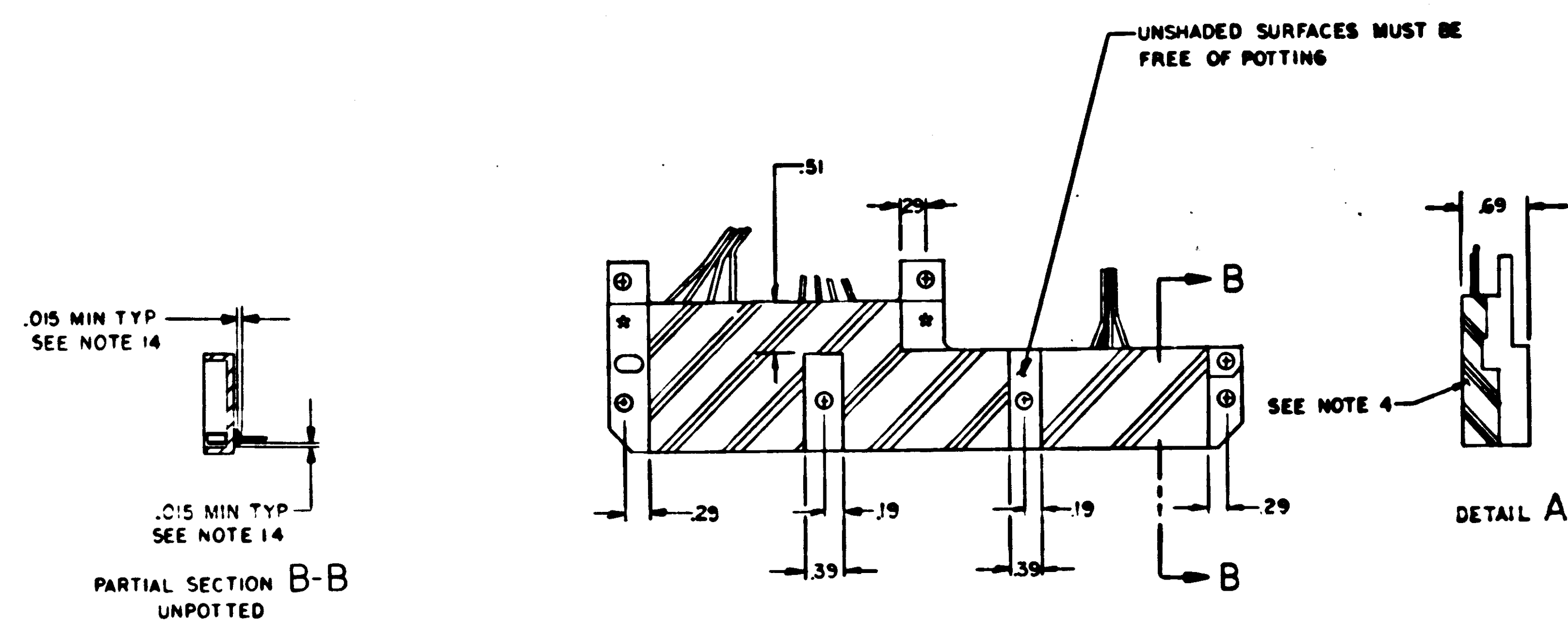
M		DATE		REVISION:		2020-	
S/N	ZONE	DESCRIPTION	DR	PMT	DATE	APPROV	
A		REVISED PER TDAR 26856	987	2.41	5/6/6		
B		REVISED PER TDAR 27913	987	2.41	5/6/6		
C		REVISED PER TDAR 28178	987	2.41	5/6/6		
D		REVISED PER TDAR 29705	987	2.41	5/6/6		



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2. MOUNTING TORQUE FOR FIND NO. 24 TO BE 2.5 TO 3.0 FT-LBS
3. IDENTIFY WITH PART NO. PER ND1002019
4. ENCAPSULATE INDICATED AREAS PER ND1002236
5. SOLDER PER ND1002071 USING SOLDER PER ND1002078
6. WELD PER ND1002005
7. A R DENOTES AS REQUIRED
8. BOND FIND NO 32,33,36, 40 & 41 TO FIND NO. 39 PER ND1002009, METHOD C
9. DRESS AND TRIM AT ASSEMBLY USING FIND NO. 34
10. SEAL FIND NO.37 TO FIND NO.1 PER ND1002004 TYPE II
11. APPLY FIND NO.36 TO INDICATED SURFACES OF FIND NO.2.
DO NOT APPLY TO BONDED RUBBER
12. MARK .07/10 HIGH BLACK CHARACTERS PER ND1002019 AND ND100212 TYPE II CLASS 2, USING MARKING INK 100G271-11
13. MOUNTING TORQUE FOR FIND NO.37 TO BE 15-20 INCH POUNDS
14. SEAL INSULATORS ON FIND NO. 4 PER ND1002004 TYPE II
15. MOUNTING TORQUE FOR FIND NO.30 TO BE 3.5-4.5 INCH POUNDS
16. MOUNTING TORQUE FOR FIND NO. 28 AND FIND NO. 29 TO BE 8 TO 9 INCH POUNDS
17. ENCAPSULATE INDICATED AREA PER ND1002295, EXCEPT CURE AT 155±5°F FOR 2 HOURS MINIMUM
18. BOND FIND NO.39 TO FIND NO.1 PER ND1002004, TYPE II
19. BOND FIND NO.33,38 AND 40 TO FIND NO.1 PER ND1002009, METHOD C
20. THIS ASSEMBLY NOT TO EXCEED 160°F IN MANUFACTURING PROCESS

QTY	PART OR IDENTIFYING NO.	INTERCONNECTING DIAGRAM	DESCRIPTION OR IDENTIFYING NO.
1	2005953		
AR	1010807-22	WIRE, INSULATED	4
AR	1010416-14	WIRE, INSULATED	4
1	2004890	SUPPORT, WIRE	3
AR	1010416-13	WIRE, INSULATED	3
1	2004039	TERMINAL, THREADED	3
1	1006879	SILICONE COMPOUND	3
AR	1010416-15	WIRE, INSULATED	3
AR	1012507-003	TAPE, LACING	3
AR	1010416-20	WIRE, INSULATED	3
AR	1010848-1	WIRE, INSULATED	3
4	NAS620-64	WASHER, FLAT	3
13	MS15129-20	SCREW, FLAT HD, CROSS RECESSED	3
4	MS151957-30	SCREW, PAN HD, CROSS RECESSED	3
2	MS10495-28	SCREW, FLAT HD, CROSS RECESSED	3
19	1010635-003	WASHER, LOCK	3
19	2004940-001	WASHER, PLAIN	3
19	1000159-10	O RING SEAL	2
19	2004942	NUT, HEX	2
1	2003984-211	SWITCH, ASSEMBLY PUSHBUTTON	2
1	-191		
1	-181		
1	-171		
1	-161		
1	-151		
1	-141		
1	-131		
1	-121		
1	-111		
1	-091		
1	-081		
1	-071		
1	-061		
1	-051		
1	-041		
1	-031		
1	2003984-011	SWITCH, ASSEMBLY PUSHBUTTON	2
1	2003948-011	CONNECTOR, PLATE ASSEMBLY	2
1	2003959-011	ADAPTER, PLATE ASSEMBLY	2
2	1006351	GASKET, PREFORMED	3
1	2004968-021	HOUSING, FRONT	2

[illegible]

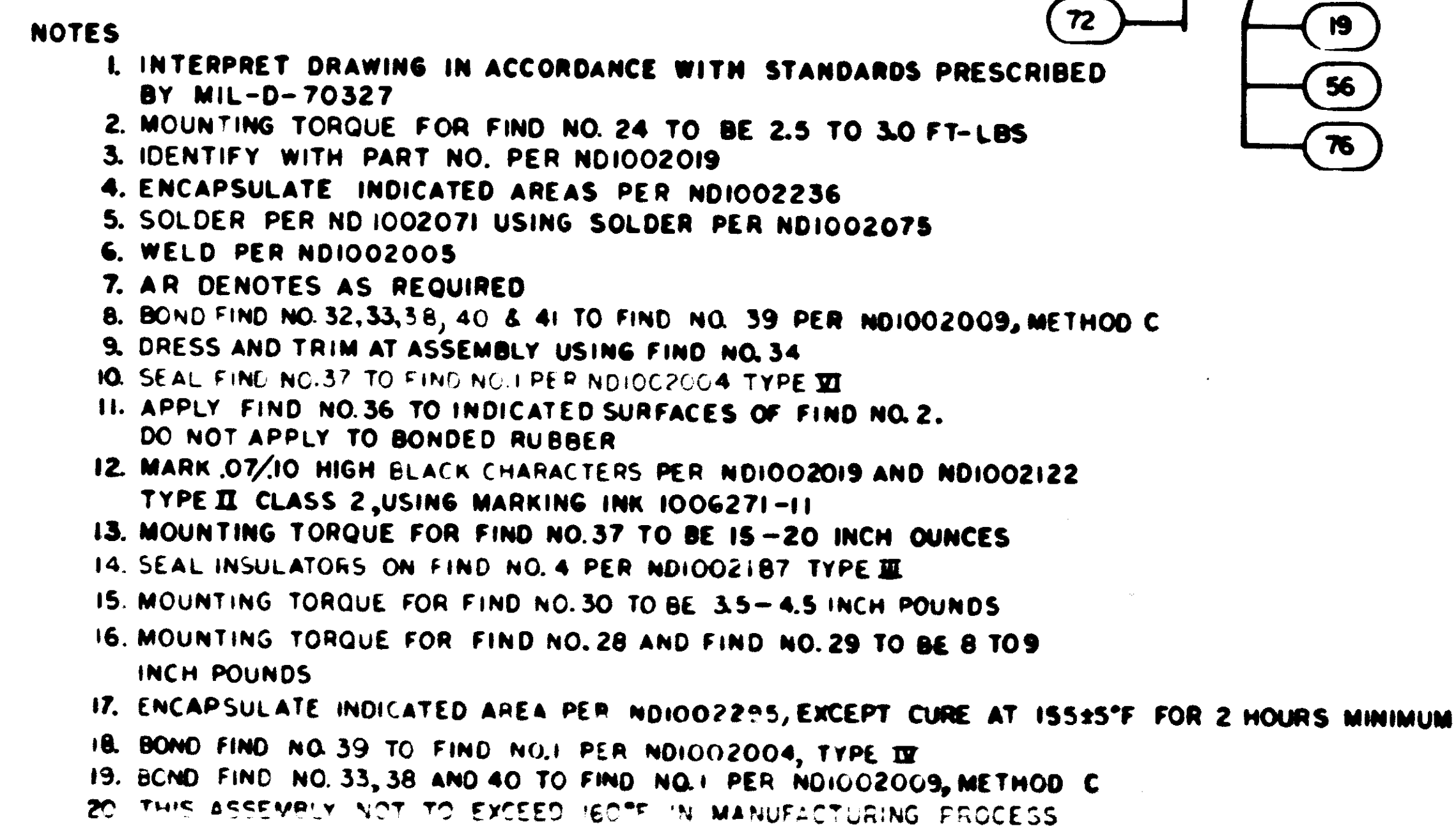


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 2. MOUNTING TORQUE FOR FIND NO. 24 TO BE 2.5 TO 3.0 FT-LBS
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 10. SEAL FIND NO. 37 TO FIND NO. 1 PER ND1002004 TYPE VI
 11. APPLY FIND NO. 36 TO INDICATED SURFACES OF FIND NO. 2.
DO NOT APPLY TO BONDED RUBBER
 12. MARK .07/10 HIGH BLACK CHARACTERS PER ND1002019 AND ND1002122
TYPE II CLASS 2, USING MARKING INK 100G271-II
 13. MOUNTING TORQUE FOR FIND NO. 37 TO BE 15-20 INCH OUNCES
 14. SEAL INSULATORS ON FIND NO. 4 PER ND1002004 TYPE VI
 15. MOUNTING TORQUE FOR FIND NO. 30 TO BE 3.5-4.5 INCH POUNDS
 16. MOUNTING TORQUE FOR FIND NO. 28 AND FIND NO. 29 TO BE 8 TO 9 INCH POUNDS
 17. ENCAPSULATE INDICATED AREA PER ND1002295, EXCEPT CURE AT 155±5°F FOR 2 HOURS MINIMUM
 18. BOND FIND NO. 39 TO FIND NO. 1 PER ND1002004, TYPE III
 19. BOND FIND NO. 33, 36, 40 & 41 TO FIND NO. 1 PER ND1002009, METHOD C
 20. THIS ASSEMBLY NOT TO EXCEED 160°F IN MANUFACTURING PROCESS

1	—	2003984-01	ADAPTER PLATE ASSEMBLY	61
1	—	2003975-211	SWITCH ASSEMBLY, PUSHBUTTON	60
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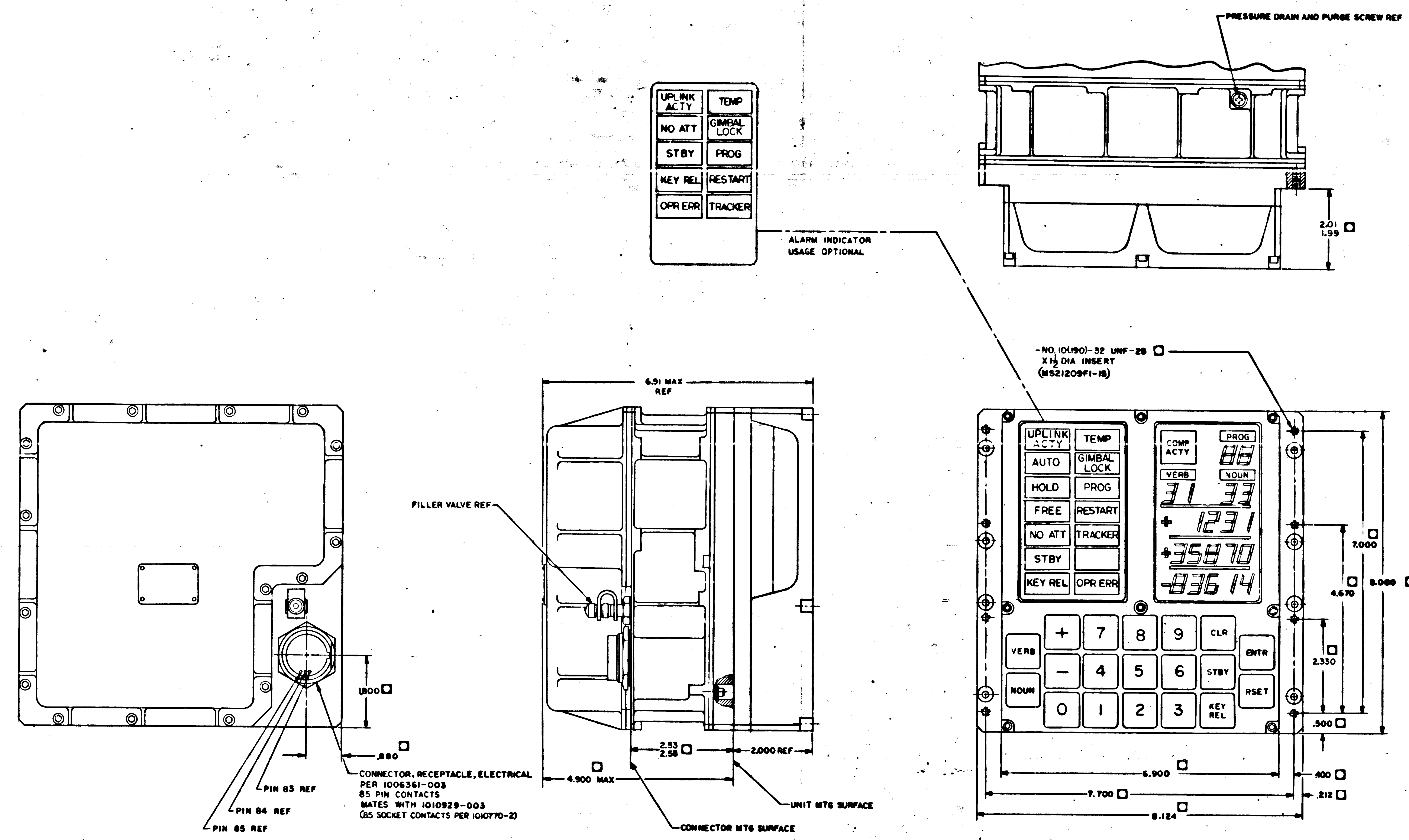
UNLESS OTHERWISE SPECIFIED CAPACITOR VALUES ARE IN μ F RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS: DECIMALS: ANGLES: .2-.01 DO NOT SCALE THIS DRAWING		C22 G11 MIT INSTR: MAPPING LAB (LAWRENCE: 10-10-69)		USE OF MATERIALS MANNED SPACECRAFT CENTER MOULTON 11-15-69	
		DRAWN BY <u>J. E. GORDON</u> CHECKED BY <u>J. E. GORDON</u> APPROVED BY <u>J. E. GORDON</u> SPECIAL BY <u>J. E. GORDON</u> APPROVED <u>J. E. GORDON</u> SPECIAL BY <u>J. E. GORDON</u>		FRONT HOUSING ASSEMBLY AGC DSKY	
2003994 2003950 NEXT ASSY USED ON		MATERIAL APPROVED BY <u>J. E. GORDON</u> MIT APPROVED BY <u>J. E. GORDON</u> MIT		CODE IDENT NO SIZE 802330 J	
APPLICATION		DRAWING NO 2003949		SHEET 1 OF 3	

	DATE	DESCRIPTION	AMOUNT	BALANCE
A	10/1	REVISED PER TORR 26856	100.00	268.56
B	10/2	REVISED PER TORR 27913	100.00	378.56
C	10/3	REVISED PER TORR 28178	100.00	478.56
D	10/4	REVISED PER TORR 29705	100.00	578.56
E	10/5	REVISED PER TORR 32580	100.00	678.56
F	10/6	REVISED PER TORR 34492	100.00	778.56



1	1	2003894-211	SWITCH ASSEMBLY, PUSHBUTTON	1			
1	1	-191		1			
1	1	-108		1			
1	1	-171		1			
1	1	-161		1			
1	1	-151		1			
1	1	-141		1			
1	1	-131		1			
1	1	-121		1			
1	1	-111		1			
1	1	-091		1			
1	1	-081		1			
1	1	-071		1			
1	1	-061		1			
1	1	-051		1			
1	1	-041		1			
1	1	-031		1			
1	1	-021		1			
1	1	2003894-011	SWITCH ASSEMBLY, PUSHBUTTON	1			
1	1	2003894-011	ADAPTER PLATE ASSEMBLY	1			
1	1	2003575-211	SWITCH ASSEMBLY, PUSHBUTTON	1			
1	1	-191		1			
1	1	-181		1			
1	1	-171		1			
1	1	-161		1			
1	1	-151		1			
1	1	-141		1			
1	1	-131		1			
1	1	-121		1			
1	1	-111		1			
1	1	-091		1			
1	1	-081		1			
1	1	-071		1			
1	1	-061		1			
1	1	-051		1			
1	1	-041		1			
1	1	-031		1			
1	1	-021		1			
1	1	2003875-011	SWITCH ASSEMBLY, PUSHBUTTON	1			
1	1	2003593	INTERCONNECTING DIAGRAM	1			
AR	AR	AR	1010807-22	WIRE, INSULATED	4		
AR	AR	AR	1010416-14	WIRE, INSULATED	4		
1	1	1	2004898	SUPPORT, WIRE	1		
AR	AR	AR	1010416-13	WIRE, INSULATED	3		
1	1	1	2004039	TERMINAL, HEADED	3		
AR	AR	AR	1010687-9	SILICONE COMPOUND	3		
AR	AR	AR	1010416-15	WIRE, INSULATED	3		
AR	AR	AR	1012507-003	TAPE, LACING	1		
AR	AR	AR	1010416-20	WIRE, INSULATED	3		
AR	AR	AR	1010848-1	WIRE, INSULATED	3		
4	4	3	WASHER, FLAT	3			
13	13	3	SCREW, FLAT HD, CROSS RECESSED	3			
4	4	4	WASHER, PAN HD, CROSS RECESSED	2			
2	2	2	SCREW, FLAT HD, CROSS RECESSED	2			
19	19	19	1010635-003	WASHER, LOCK	1		
19	19	19	2004942-001	WASHER, PLAIN	2		
19	19	19	1010159-16	O-RING SEAL	1		
19	19	19	2004942	NUT, HEX	1		
1	1	1	2003584-211	SWITCH ASSEMBLY, PUSHBUTTON	1		
1	1	1	-191		1		
1	1	1	-181		1		
1	1	1	-171		1		
1	1	1	-161		1		
1	1	1	-151		1		
1	1	1	-141		1		
1	1	1	-131		1		
1	1	1	-121		1		
1	1	1	-111		1		
1	1	1	-091		1		
1	1	1	-081		1		
1	1	1	-071		1		
1	1	1	-061		1		
1	1	1	-051		1		
1	1	1	-041		1		
1	1	1	-031		1		
1	1	1	-021		1		
1	1	1	2003894-011	SWITCH ASSEMBLY, PUSHBUTTON	1		
1	1	1	2003894-011	CONNECTOR PLATE ASSEMBLY	1		
1	1	1	2003899-011	ADAPTER PLATE ASSEMBLY	1		
2	2	2	0006351	GASKET, PREFORMED	2		
1	1	1	2004968-021	HOUSING, FRONT	1		
QTY	STD	PLNG	MAINTENANCE KIT	QTY	STD	PLNG	MAINTENANCE KIT

2003994 2003990 NET WT. USED ON APPLICATION		UNLESS OTHERWISE SPECIFIED, USE THE FOLLOWING VALUES AND TOLERANCES ON FRACTIONS: DECIMALS AND 15 DIGIT. DO NOT ROUND THIS DRAWING. MATERIAL		MAT'L INSTRUMENTATION LAB C-1000-000-000-000 DRAWN BY: <i>[Signature]</i> CHECKED BY: <i>[Signature]</i> APPROVED BY: <i>[Signature]</i> APPROVED BY: <i>[Signature]</i>		MANAGER: PROCRACRAFT CENTER HOUSTON, TEXAS FRONT HOUSING ASSEMBLY AGC DSKY	
802394 J		802394 J		802394 J		802394 J	



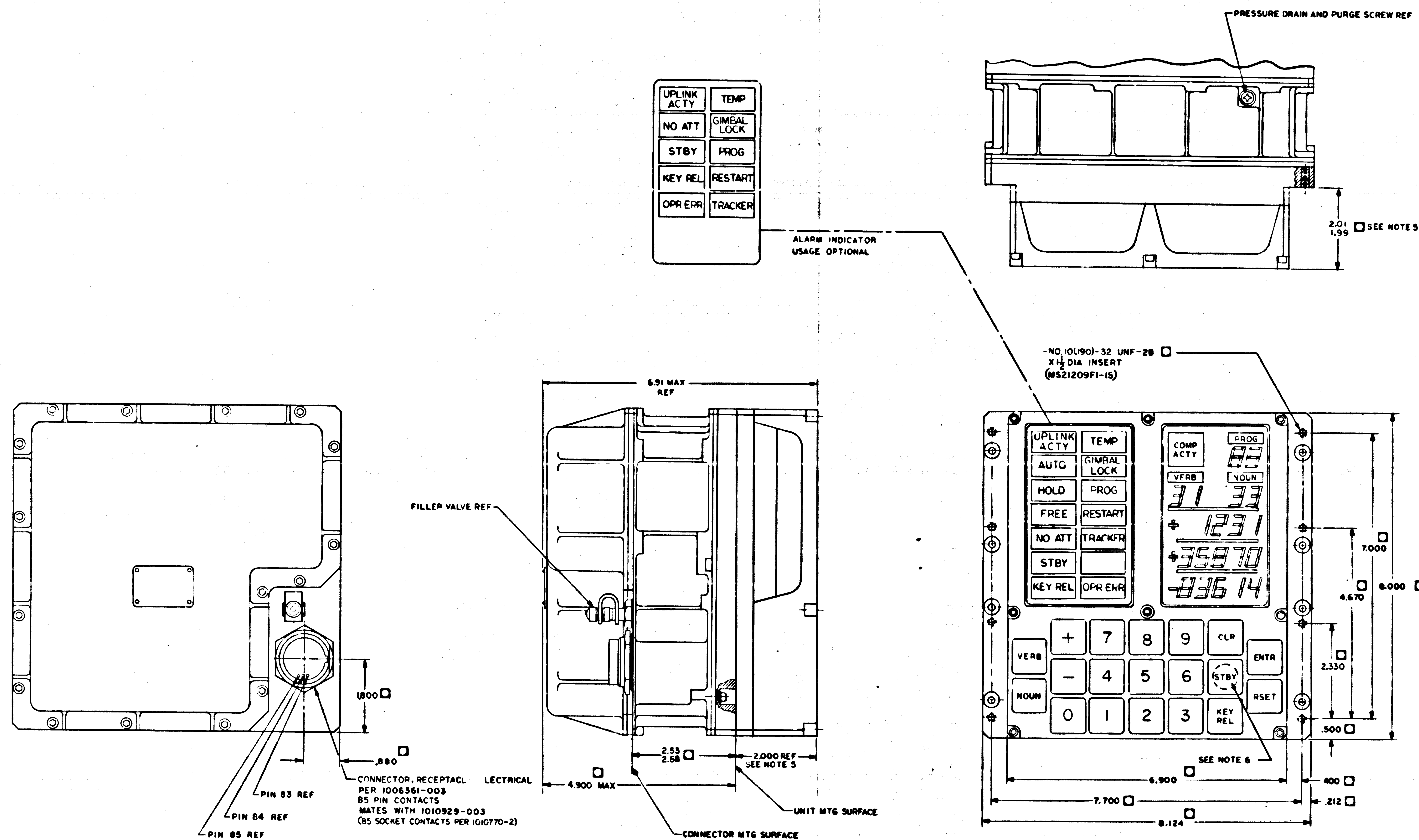
NOTES

1. DIMENSIONS CONTROLLED BY ICD MHOI-01305-116
2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
3. WEIGHT *See*
4. \odot INDICATES CENTER OF GRAVITY *See*

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIG NO																																
<table border="1"> <tr> <td colspan="2">UNLESS OTHERWISE SPECIFIED</td> <td colspan="2">INSTRUMENTATION LAB</td> </tr> <tr> <td colspan="2">DIMENSIONS ARE IN INCHES</td> <td colspan="2">MANNED SPACECRAFT CENTER</td> </tr> <tr> <td colspan="2">TOLERANCES OR</td> <td colspan="2">HOUSTON, TEXAS</td> </tr> <tr> <td>FRACTIONS</td> <td>DECIMALS</td> <td colspan="2"> AGC DSKY OUTLINE DRAWING </td> </tr> <tr> <td>DO NOT SCALE THIS DRAWING</td> <td>8.005</td> <td colspan="2"> NASA DRAWING NO. 80230 J 2003956 </td> </tr> <tr> <td colspan="2">MATERIAL</td> <td colspan="2"> SCALE 1/1 SHEET 1 OF 1 </td> </tr> <tr> <td colspan="2">HEAT TREATMENT</td> <td colspan="2"> NEXT APPR. USED ON </td> </tr> <tr> <td colspan="2">FINISH TREATMENT</td> <td colspan="2"> APPLICATION </td> </tr> </table>				UNLESS OTHERWISE SPECIFIED		INSTRUMENTATION LAB		DIMENSIONS ARE IN INCHES		MANNED SPACECRAFT CENTER		TOLERANCES OR		HOUSTON, TEXAS		FRACTIONS	DECIMALS	AGC DSKY OUTLINE DRAWING		DO NOT SCALE THIS DRAWING	8.005	NASA DRAWING NO. 80230 J 2003956		MATERIAL		SCALE 1/1 SHEET 1 OF 1		HEAT TREATMENT		NEXT APPR. USED ON		FINISH TREATMENT		APPLICATION	
UNLESS OTHERWISE SPECIFIED		INSTRUMENTATION LAB																																	
DIMENSIONS ARE IN INCHES		MANNED SPACECRAFT CENTER																																	
TOLERANCES OR		HOUSTON, TEXAS																																	
FRACTIONS	DECIMALS	AGC DSKY OUTLINE DRAWING																																	
DO NOT SCALE THIS DRAWING	8.005	NASA DRAWING NO. 80230 J 2003956																																	
MATERIAL		SCALE 1/1 SHEET 1 OF 1																																	
HEAT TREATMENT		NEXT APPR. USED ON																																	
FINISH TREATMENT		APPLICATION																																	

2003956 B

REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL
A	REVISED PER TORR 26-04 DR <i>[Signature]</i> CHM <i>[Signature]</i> ALD <i>[Signature]</i>	27	
B	REVISED PER TORR 350-6 DR <i>[Signature]</i> CHM <i>[Signature]</i> ST <i>[Signature]</i>	28	



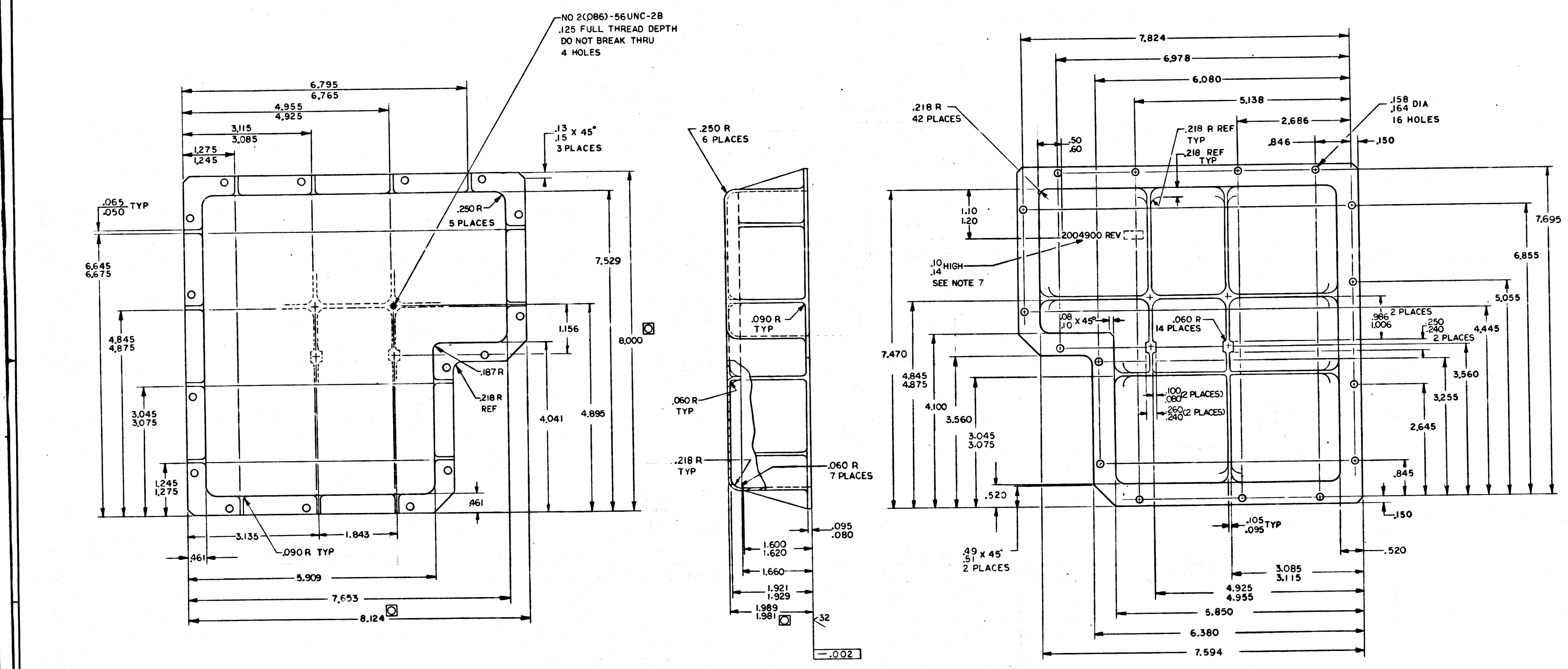
NOTES

1. DIMENSIONS CONTROLLED BY ICD MHOI-01305-116
2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
3. WEIGHT *1.1 lb*
4. \odot INDICATES CENTER OF GRAVITY *Small hole*
5. THE 20.1/1.99 DIMENSION APPLIES TO ALL CONFIGURATION UNIVERSAL DSKYS WITH THE EXCEPTION OF THE 2003985-061, 2003950-021, 2003994-021 & SUBSEQUENT CONFIGURATIONS IN WHICH THE SURFACE OF THE I/L & COVER ASSY 2003899-011 SHALL PROTRUDE BEYOND THE MAXIMUM SHOWN UP TO A MAXIMUM OF .09
6. THE 2003985-061, 2003950-031, 2003994-021 & SUBSEQUENT CONFIGURATIONS SHALL REFLECT "PRO" IN KEY POSITION INDICATED.

2003956 B

2003956 B

QTY REQD	PART OR IDENTIFYING NO	DESCRIPTION	END NO
LIST OF MATERIALS			
INSTRUMENTATION LAB		MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
CHECKED <i>[Signature]</i> DATE <i>10/2/64</i>		AGC DSKY OUTLINE DRAWING	
APPROVAL <i>[Signature]</i> DATE <i>10/2/64</i>		NASA DRAWING NO 2003956	
NESA APPROVAL <i>[Signature]</i> DATE <i>10/2/64</i>		CODE IDENT NO 80230 J	
NESA APPROVAL <i>[Signature]</i> DATE <i>10/2/64</i>		SCALE 1/1	
NESA APPROVAL <i>[Signature]</i> DATE <i>10/2/64</i>		SHEET OF 1	



- NOTES
1. MATL: 7075-T6 AL PER QQ-A-250/12, TEMP T6
 2. REMOVE BURRS AND SHARP EDGES .005/.020
 3. SURFACE FINISH: 125 EXCEPT WHERE OTHERWISE SHOWN
 4. CHROMATE PER MIL-C-5541, TYPE II, GRADE C, CLASS 3
 5. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 6. DIMENSIONS CONTROLLED BY ICD MH01
 7. MARK AS SHOWN: BLACK CHARACTERS PER ND1002019 AND ND1002122, TYPE II, CLASS 2 USING INK IC06271-10

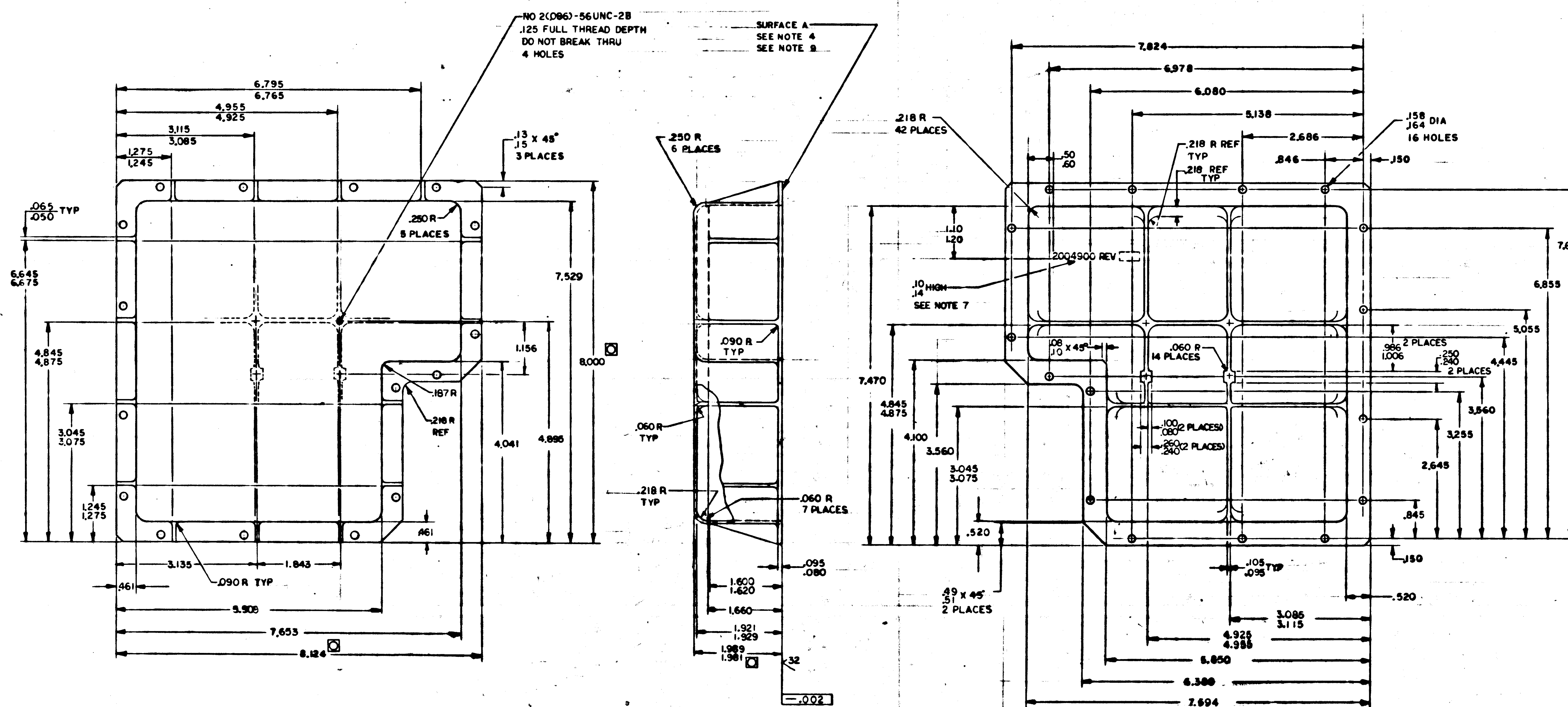
QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIG NO.
LIST OF MATERIALS			
MANNED SPACECRAFT CENTER HOUSTON, TEXAS			
COVER, REAR AGC DSKY			
2003900	USED ON	SCALE 1/1	WT
APPLICATION		SHEET 1 OF 1	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		MIT INSTRUMENTATION LAB CAMBRIDGE, MASS	
TOLERANCES ON		DRAWN BY	DATE
FRACTIONS	DECIMALS	CHECKED BY	
		APPROVAL BY	
DO NOT SCALE THIS DRAWING		MIT APPROVAL	
MATERIAL		NASA APPROVAL	
SEE NOTE 1		MIT APPROVAL	
HEAT TREATMENT		NASA APPROVAL	
NONE		MIT APPROVAL	
FINAL FINISH		NASA APPROVAL	
SEE NOTE 4		MIT APPROVAL	

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS ARE TO BE TAKEN FROM THE CENTER OF THE HOLE UNLESS OTHERWISE SPECIFIED. DIMENSIONS ARE TO BE TAKEN FROM THE CENTER OF THE HOLE UNLESS OTHERWISE SPECIFIED. DIMENSIONS ARE TO BE TAKEN FROM THE CENTER OF THE HOLE UNLESS OTHERWISE SPECIFIED.

2004900 A

REV	DESCRIPTION	DATE	APPROVAL
1	REVISED PER TDR 22781	11/86	11/86
2	DRAWN CHK APPD		





- NOTES
1. MATL: 6061-T6-AL PER QQ-A-250/11,TEMP 6
 2. REMOVE BURR AND SHARP EDGES.005/.015
 3. ALL SURFACES 12Z
 4. CHROMATE PER MIL-C-5541,TYPE II,GRADE C,CLASS
 5. UNLESS OTHERWISE SPECIFIED ALL FILLETS
 6. AND RADI TO BE .06 R MAX
 7. MARK .10/.4 HIGH BLACK CHARACTERS PER
 8. NID00209 AND NID00212,TYPE II,CLASS 2
 9. USING INK 10627-01
 10. DIMENSIONS CONTROLLED BY VCD MHHH
 11. PAINT INDICATED SURFACE BY K00213
 12. RED GRAY EPOXY ENAMEL PER NID00210
 13. INTERPRET DRAWING IN ACCORDANCE WITH
 14. STANDARDS PRESCRIBED BY MIL-D-70387

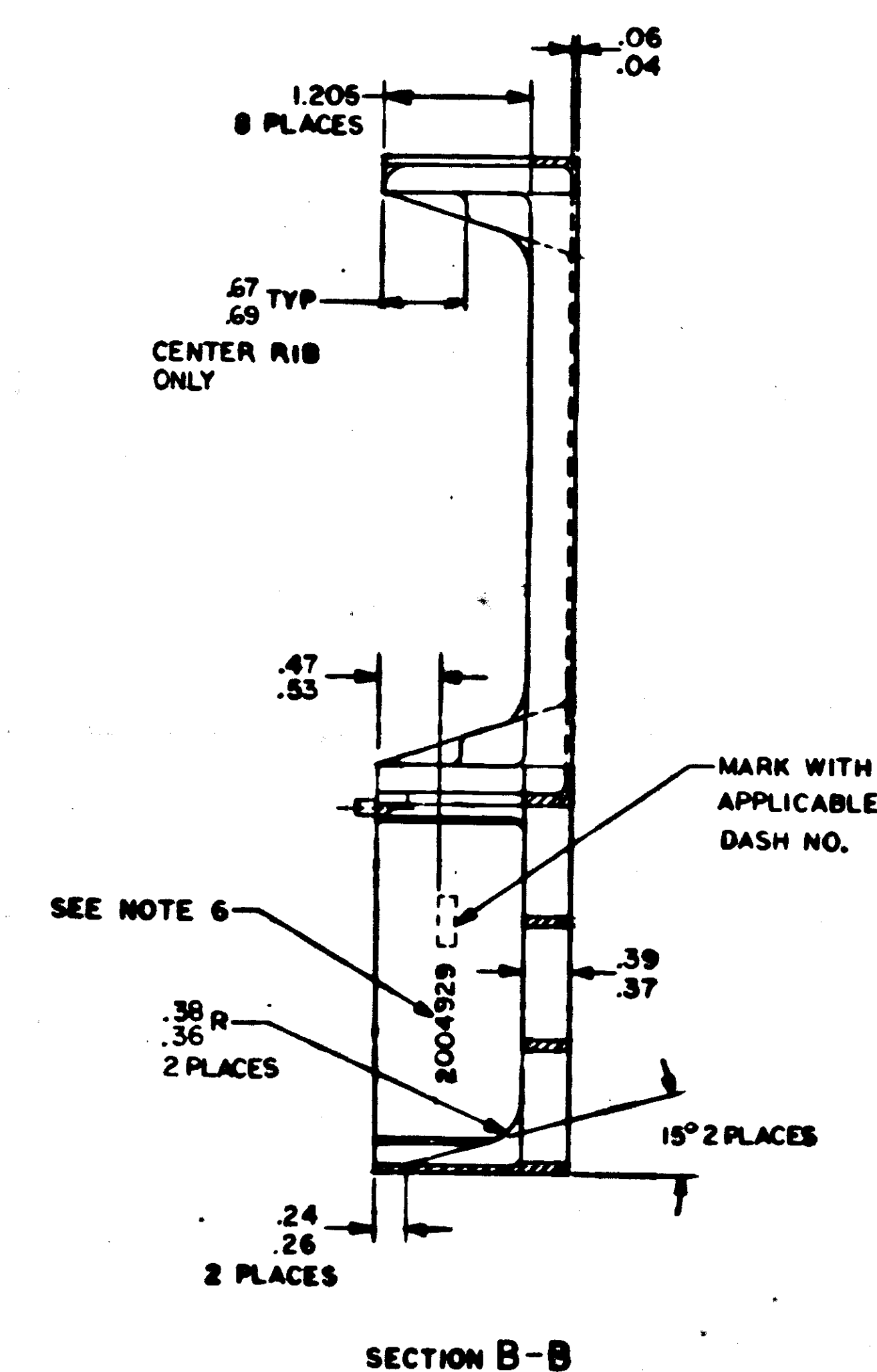
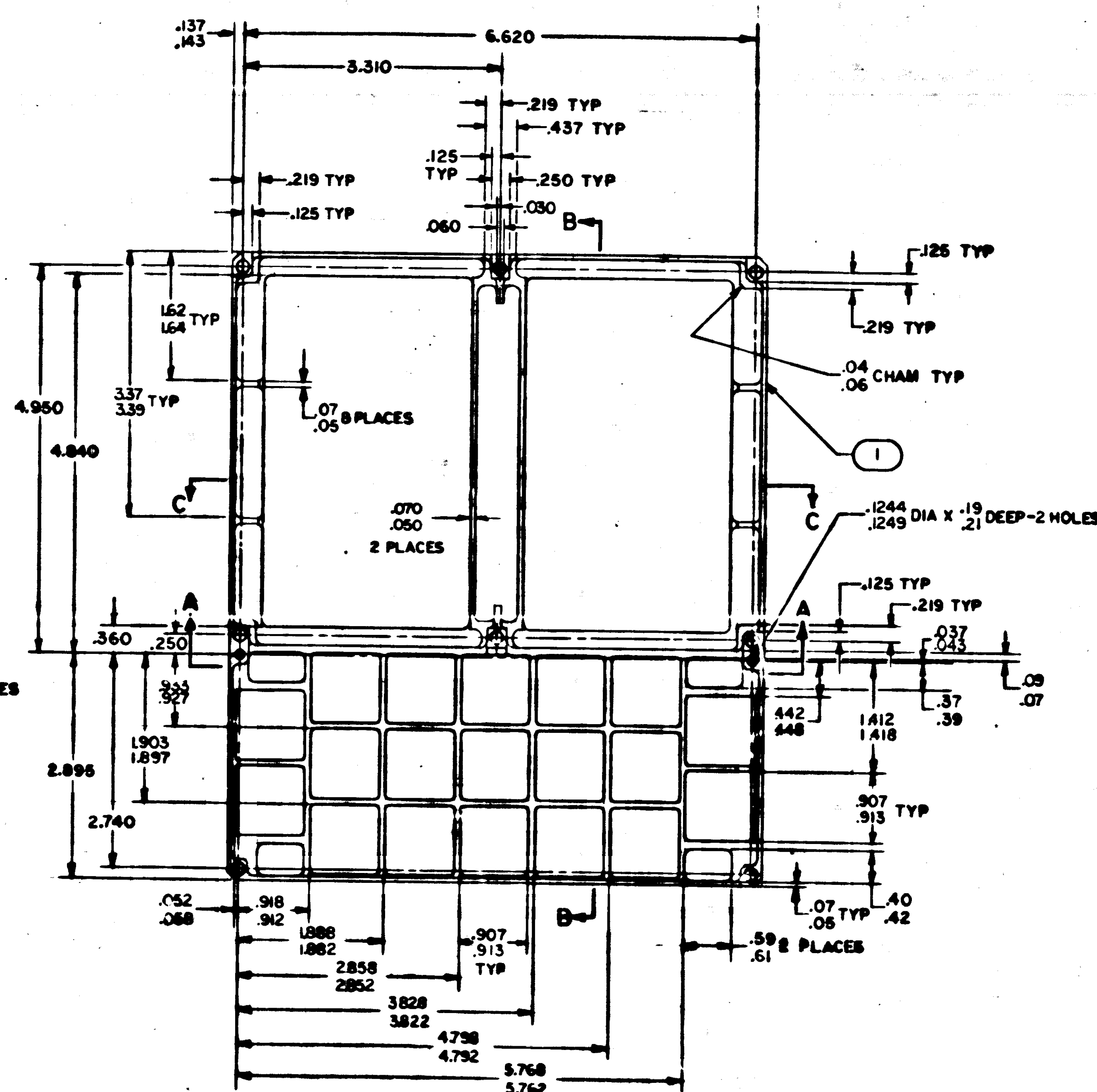
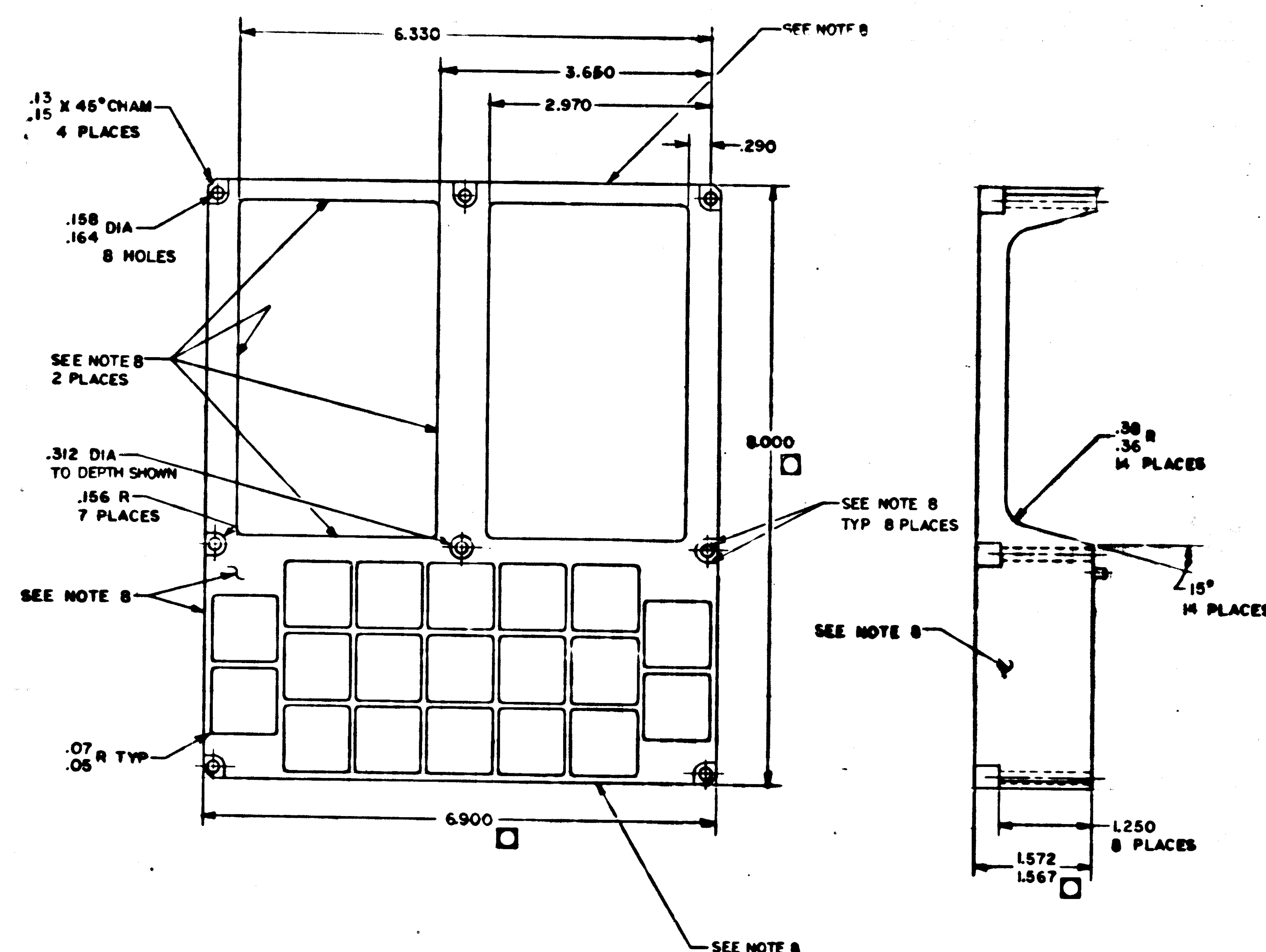
2		MSI6555-628		PIN, DOWEL		2	
2004923-001				COVER, FRONT			
071		PART OR IDENTIFYING NO.		NOMENCLATURE OR DESCRIPTION		PNO NO.	
011				LIST OF MATERIALS			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE FRACTIONS DECIMALS ANGLES +006 -Z DO NOT SCALE THIS DRAWING ORIGINAL		CITY DISSEMINATION/LAB CLASSIFICATION CONTROL: <i>SECRET</i> CHECKED: <i>[Signature]</i> APPROVED: <i>[Signature]</i> APPROVED: <i>[Signature]</i>		MAINTENANCE SPACECRAFT CENTER HOUSTON, TEXAS COVER, FRONT AGC FRONT			
2003900		DATE RELIANT NONE		DATE APPROVAL: <i>[Signature]</i>		COAT BAY NO. 1 80230 J	
NEXT ADV		USE ON		DATE APPROVAL: <i>[Signature]</i>		DATA SHEET NO. 2004929	
APPLICATION		SEE NOTES 4 & 8		DATE APPROVAL: <i>[Signature]</i>			



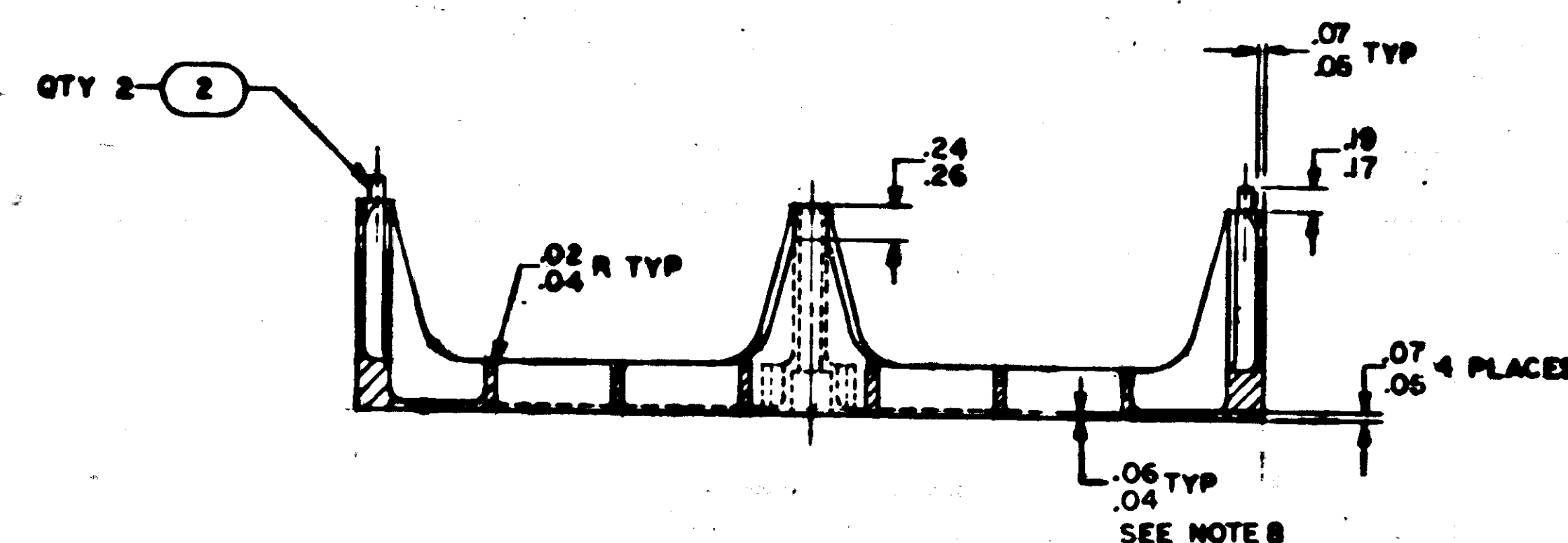
- TRANSITION

		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS ANGLES		2 MS16555-625 1 2004929-001 QTY PART OR IDENTIFYING NO. 011		PIN, DOWEL COVER, FRONT NOMENCLATURE OR DESCRIPTION LIST OF MATERIALS		1 2004929-001 QTY PART OR IDENTIFYING NO.			
		DRAWN: <i>[Signature]</i> DATE: <i>10/10/68</i> CHECKED: <i>[Signature]</i> APPROVED: <i>[Signature]</i> MATERIAL SEE NOTE 1 NEW TREATMENT NONE FINISH SEE NOTES 4 & 8		M.I.Y. INVESTIGATION LAB NUMBER 1000 DATE 10/10/68 DRAWN: <i>[Signature]</i> DATE: <i>10/10/68</i> CHECKED: <i>[Signature]</i> APPROVED: <i>[Signature]</i>		MANNED SPACECRAFT CENTER INDUSTRIAL TEMPS COVER, FRONT AGC DSKY COAT: <i>Black</i> J 60230 PART APPROVAL: <i>[Signature]</i> 2004929 NET APPROVAL: <i>[Signature]</i> 60230 NET APPROVAL: 60230				1 2004929-001 QTY PART OR IDENTIFYING NO.	
2003986 2003990 NET APP USED ON APPLICATION											

SECTION C-C



SECTION B-B

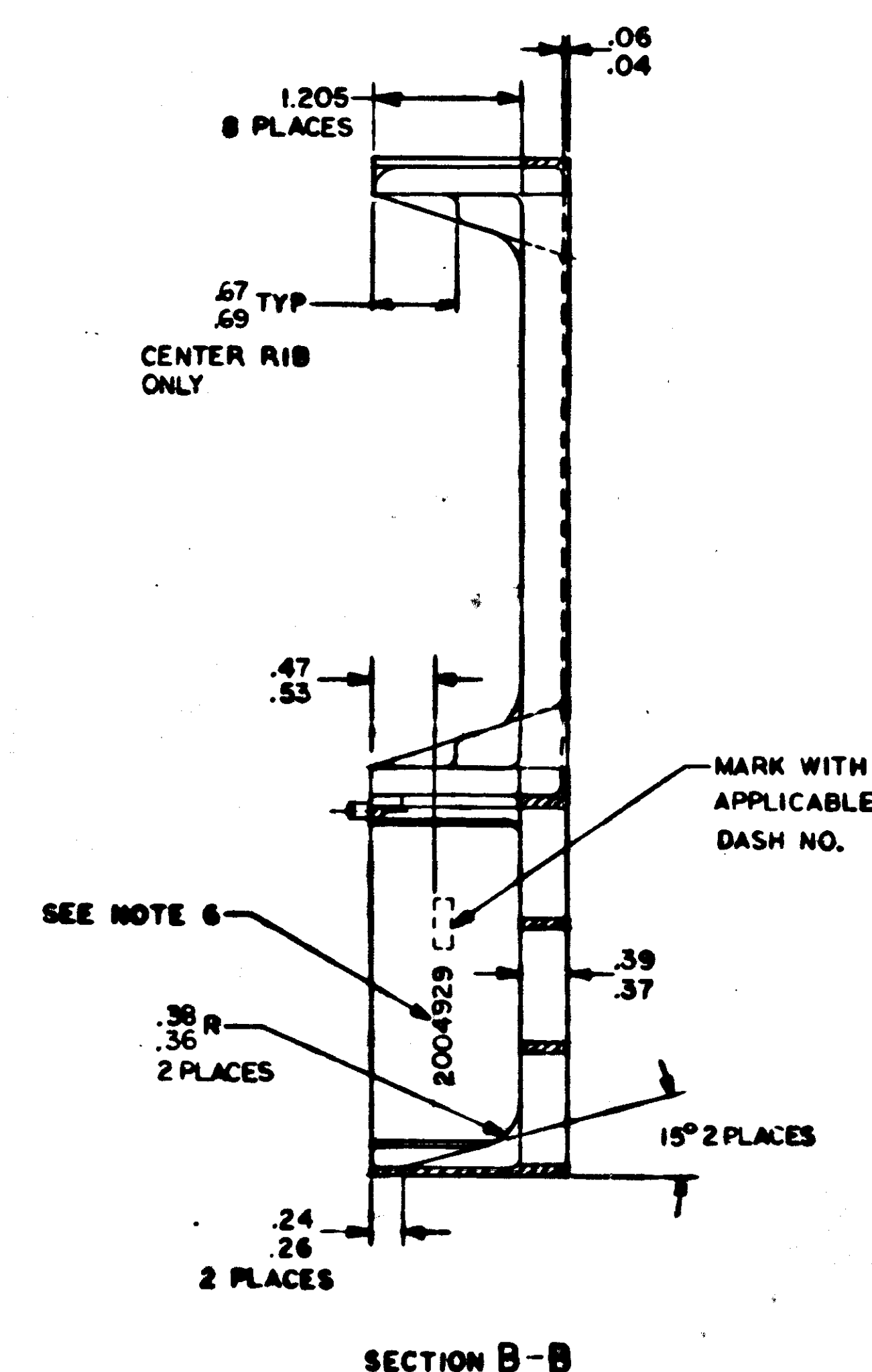
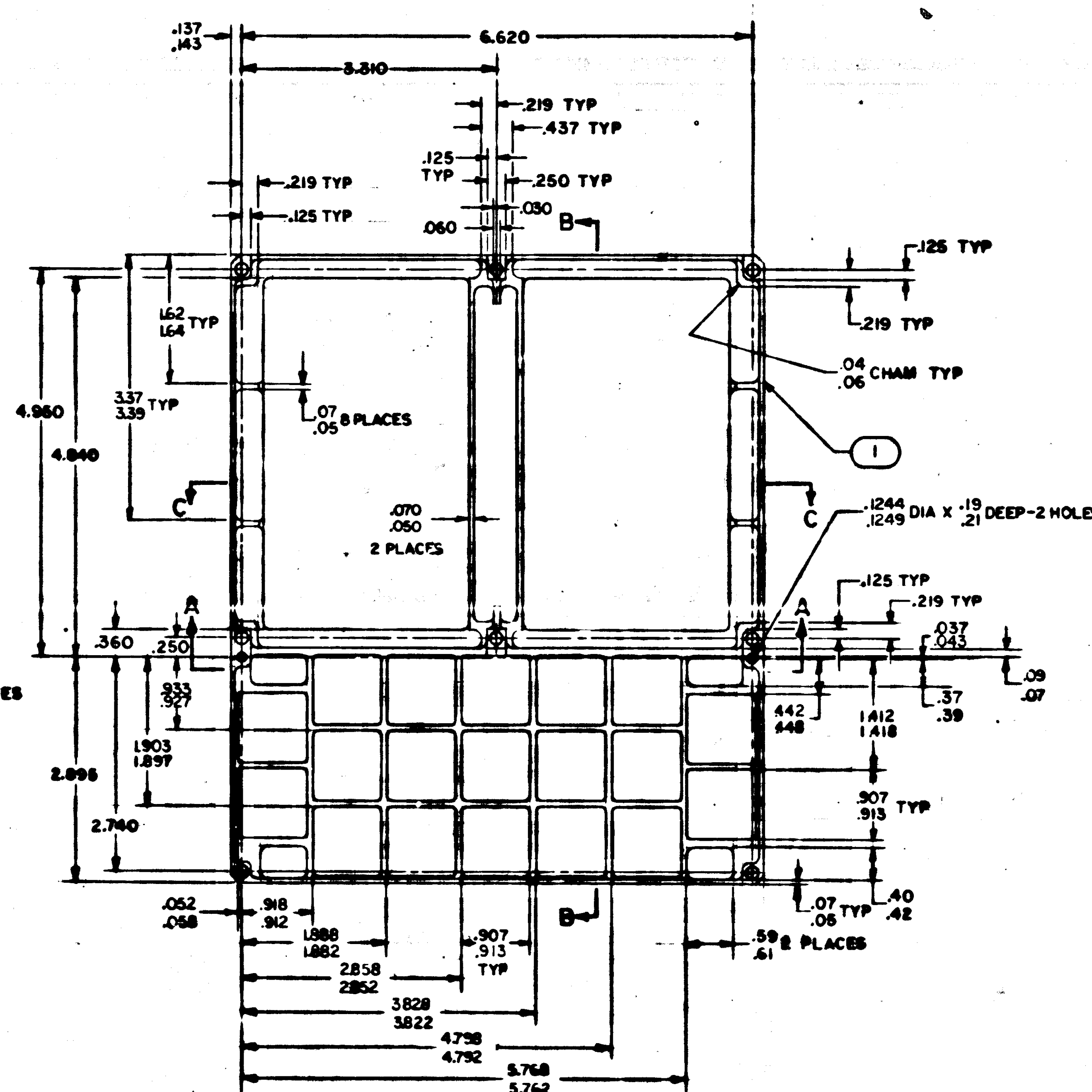
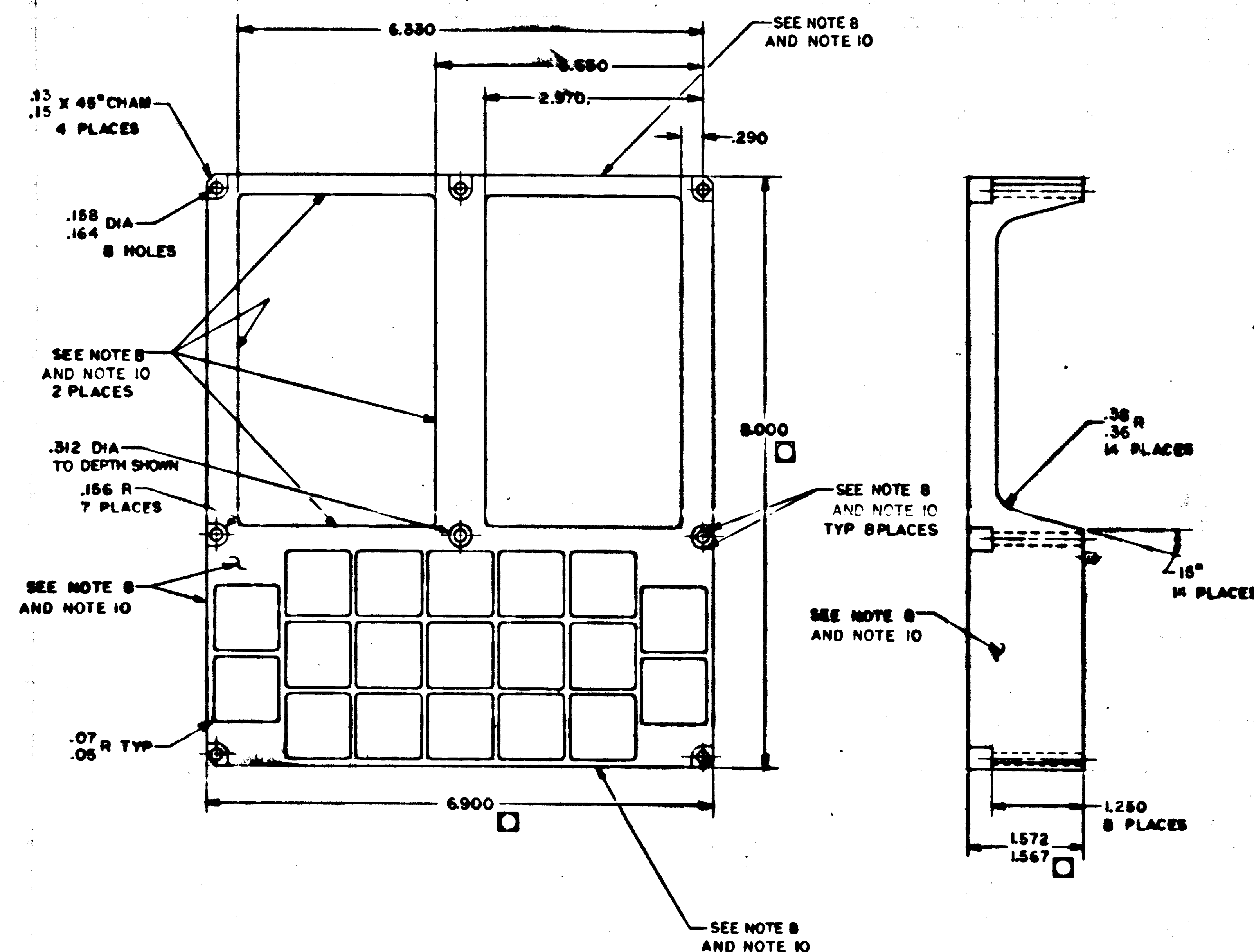


SECTION A-A

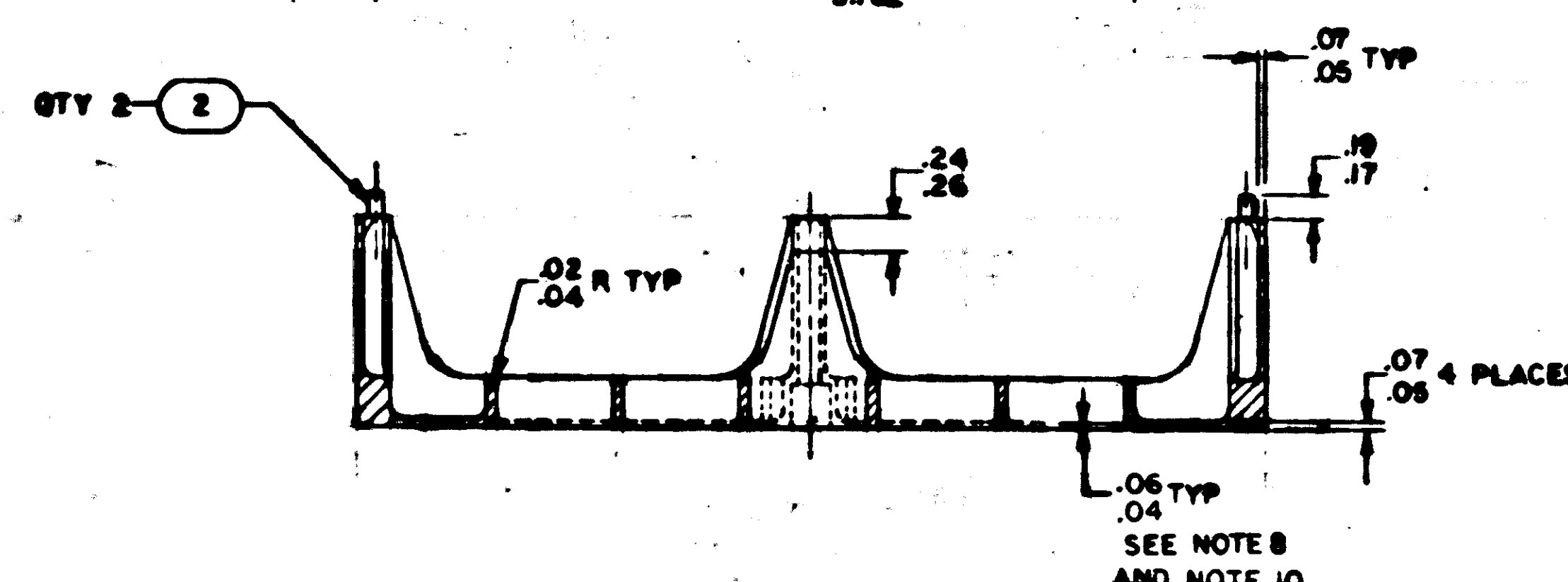
NOTES

- NOTES
1. MATL0061TG-AL PER QQ-A-250/11TEMP6
 2. REMOVE BURRS AND SHARP EDGES.005/.015
 3. ALL SURFACES 12/9
 4. CHFMATE PER MIL-C-5541,TYPE II,GRADE C,CLASS B
 5. UNLESS OTHERWISE SPECIFIED ALL FILETS AND RADI TO BE .09 R MAX
 6. MARK 12/9 6-116 116 CHARACTERS PER
ND C02019 AND ND100212,TYPE II,CLASS 2
FAC NUMBER 1706271-1
 7. DIMENSIONS CONTROLLED BY ICD MHQI-01305-116
2-INT. INDICATED SURFACES WITH 1008009-1
RED GRAY STAMP LABEL PER 1002729
8. INTERPRET DRAWING IN ACCORDANCE WITH
STANDARDS DESCRIBED BY MIL-C-70337.

2	MSI6555-628		PIN, DOWEL		2
1	2004929-OOI		COVER, FRONT		1
QTY REQD	PART OR IDENTIFYING INB.	NOMENCLATURE OR DESCRIPTION			PHO NO
OOI	LIST OF MATERIALS				
EITV INTERPOLATION LABS COMMERCIAL UNIT DATE: 01/01/80 CHECKED: <i>[Signature]</i> DATE: 01/01/80 APPROVAL: <i>[Signature]</i> DATE: 01/01/80 APPROVAL: <i>[Signature]</i> DATE: 01/01/80			MAHED SPACECRAFT CENTER MOUNTAIN VIEW		
			COVER, FRONT		
			AGC DSKY		
MAHA APPROVAL: <i>[Signature]</i> MAHA APPROVAL: <i>[Signature]</i>			CODE: 800230 800230	SIZE: J	REQD. QUANTITY TO: 2004929
EITV APPROVAL:					



SECTION B-1



SECTION A-

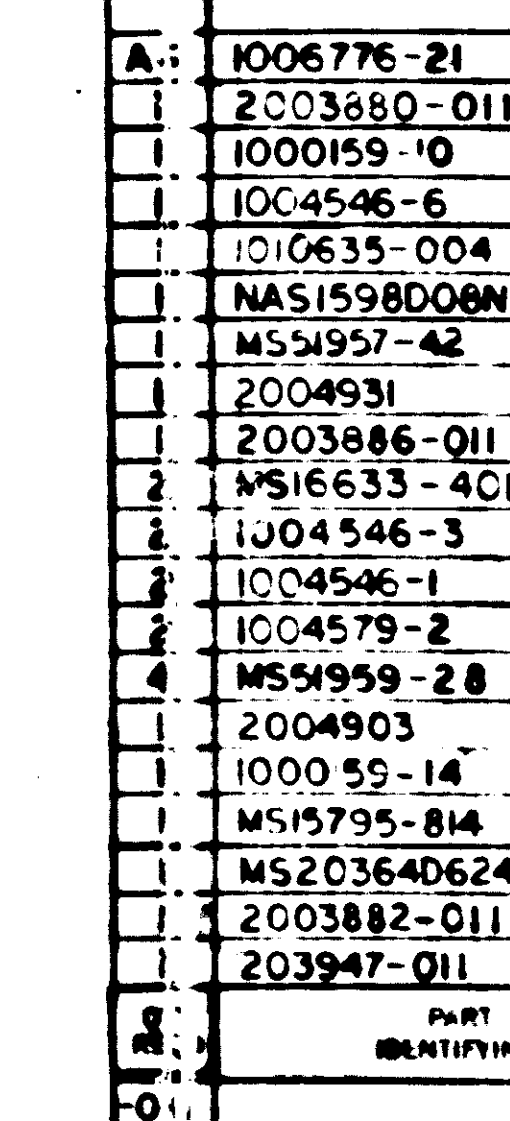
- NOTES
1. MATL:0601-T6-HL PER QQ-A-250/1,ITEM6
 2. REMOVE BURR& SHARP EDGES.QQ5/Q15
 3. ALL SURFACES 125
 4. CPINMATE PER MIL-C-5541,TYPE II,GRADE C,CLASS B
 5. UNLESS OTHERWISE SPECIFIED ALL FILLETS AND RADII TO BE .009 R MAX
 6. MARK .7/4 HIGH BLACK CHARACTERS PER
ND0002019 AND ND0002122,TYPE II,CLASS 2
USNG INK 1006271-10
 7. DIMENSIONS CONTROLLED BY ICD MMH-111 15-116
 8. UNLESS INDICATED SURFACES WITH 0008809-1
GRAY EPOXY ENAMEL PER 1002278
 9. INTERPRET DRAWING IN ACCORDANCE WITH
STANDARDS PRESCRIBED BY MIL-D-70327
 10. F.V. ALLOT NOT INDICATED SURFACES PER ND0002277
USNG INK 100643-003

1	2	MS16555-625	PKS, DOWEL	1	2
		2004929	COVER, FRONT		
QTY REQD	QTY REQD	PART OR IDENTIFYING INFO.	NOMENCLATURE OR DESCRIPTION		PKS
QTY	QTY				PKS
01	01		LIST OF MATERIALS		
BITY			MANHATTAN SPACECRAFT CENTER		
INTELLIGENCE LAB			HOUSTON, TEXAS		
COUNTRY: <u>USA</u>			COVER, FRONT		
CHECKED: <u>W. J. [unclear]</u>			AGC DSKY		
APPROVED: <u>[unclear]</u>					
APPROVAL: <u>[unclear]</u>					
REASON APPROVAL: <u>W. J. [unclear]</u>			CASE NO. <u>80230</u>	SIZE <u>J</u>	DATA (CONTINUED) NO. <u>2004929</u>
REASON APPROVAL: <u>[unclear]</u>					
REASON APPROVAL: <u>[unclear]</u>					

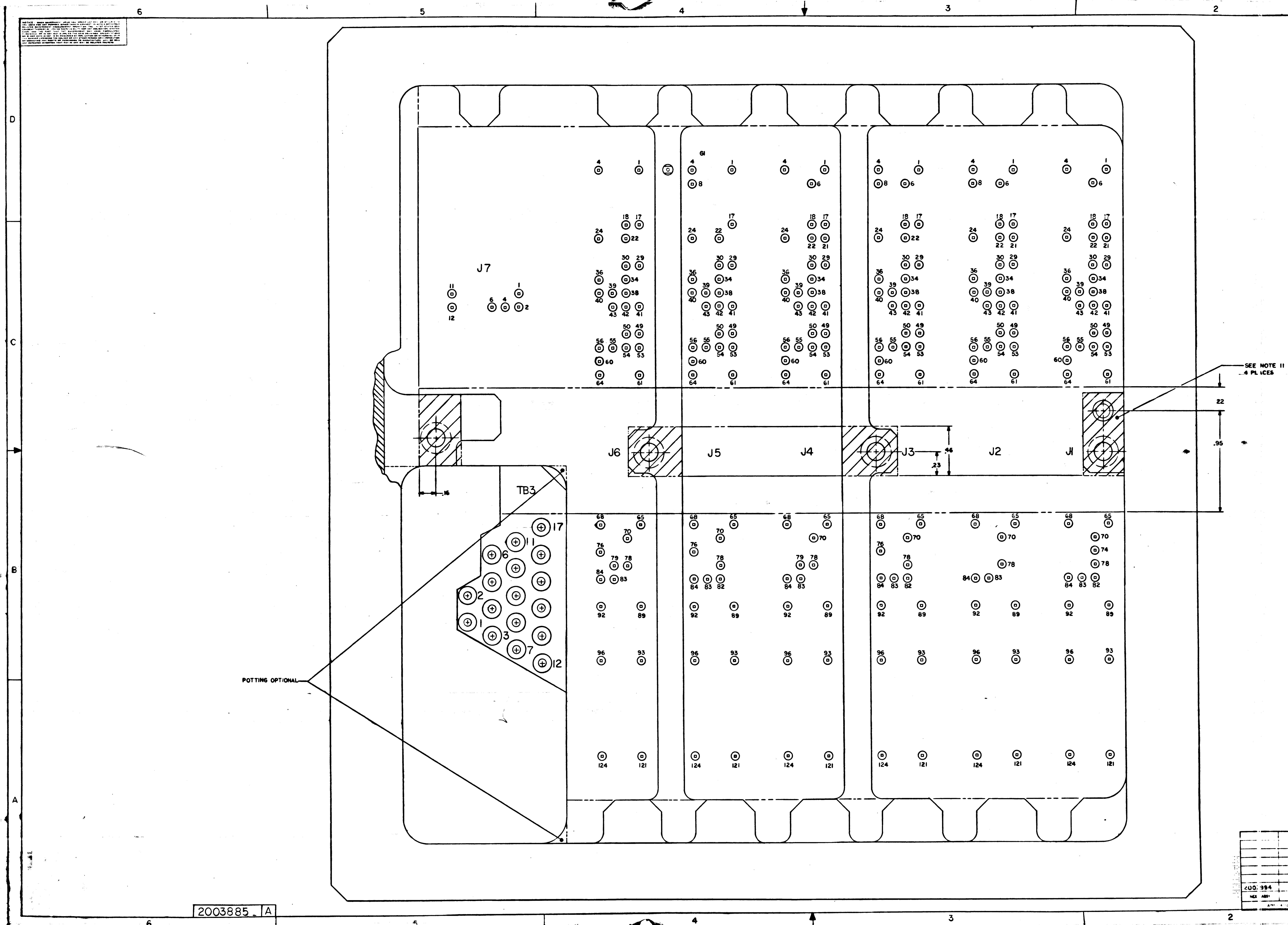
MASTER

2004929

D



- [illegible]



2003885	A
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1/2003885

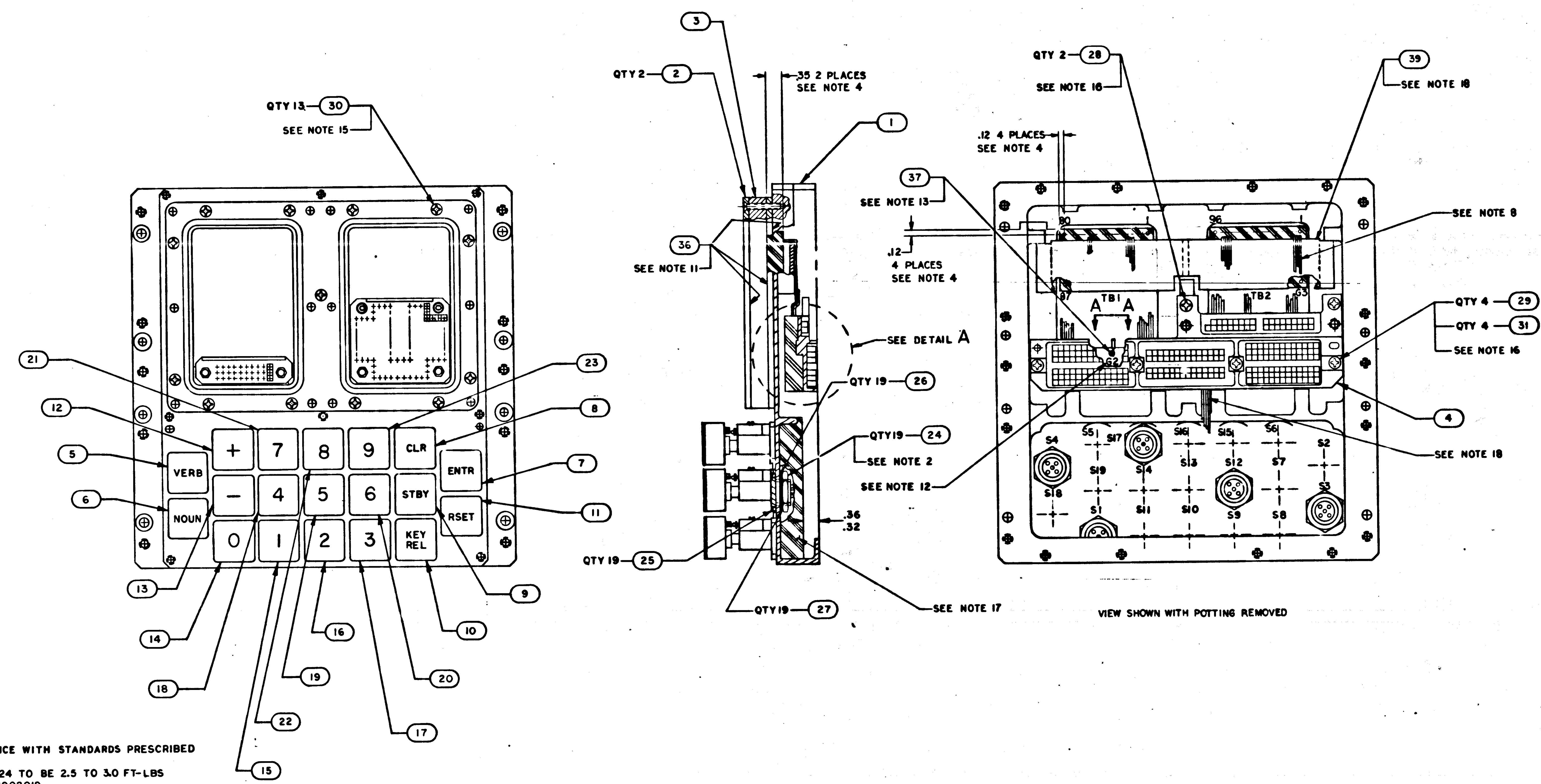
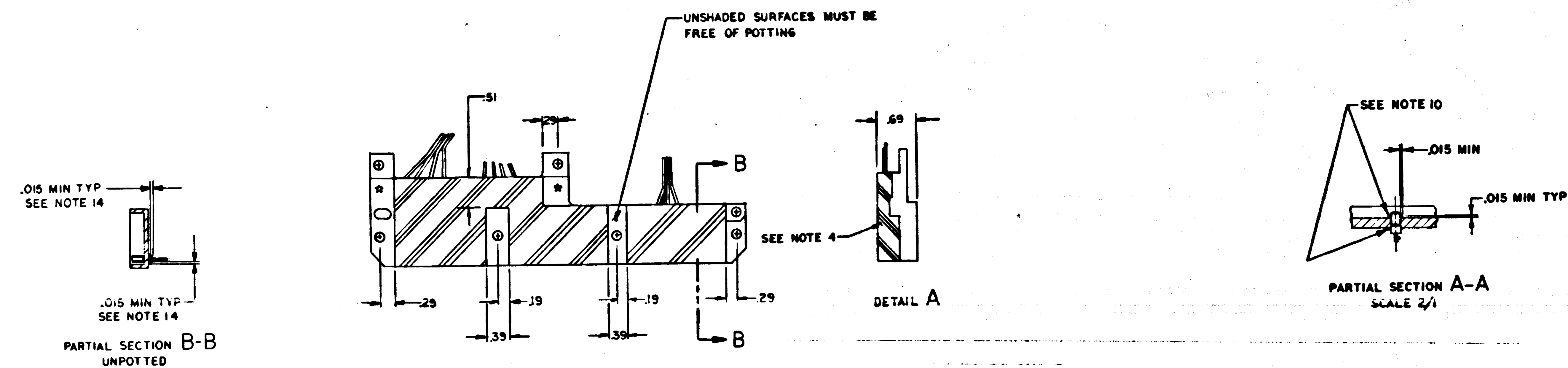
200.994	
NEX ABSY	

LEAD ELECTRICAL								
COND. IDENT.	REMARKS	FROM	SEE NOTE	COLOR	SIZE AWG	LENGTH	TO	REMARKS
A1		J12-166	16	OPT	30		J7-6	
A2		-167	16	OPT	30	AR	J6-43	
A3		-160	17	WHT	26		-18	
A4		-159	16	OPT	30		-34	
A5		-154					-40	
A6		-153					-50	
A7		-148	16	OPT	30		-39	
A8		-147	17	WHT	26		-38	
A9		-142	16	OPT	30		-54	
A10		-141					-41	
A11		-136					-29	
A12		-135					-55	
A13		-187					-42	
A14		-210	16	OPT	30		-49	
A15		-182	17	WHT	26		-60	
A16		-204	16	OPT	30		-56	
A17		-192					-17	
A18		-176					-36	
A19		-175					-22	
A20		-174					J6-30	
A21		-170					J7-4	
A22		-169					J6-24	
A23		-168					J6-53	
A24		-164					J5-43	
A25		-163					-34	
A26		-162					-36	
A27		-161					-22	
A28		-158					-56	
A29		-157					-39	
A30		-156	16	OPT	30		-24	
A31		-155	17	WHT	26		-8	
A32		-152					-42	
A33		-151	16	OPT	30		-40	
A34		-150	17	WHT	26		-38	
A35		-145	16	OPT	30		-30	
A36		-146					-90	
A37		-145					-55	
A38		-144					-49	
A39		-143					-29	
A40		-140					-54	
A41		-139					-53	
A42		-138					-41	
A43		-137	16	OPT	30		-17	
A44		-134	17	WHT	26		J5-60	
A45		-133					J6-43	
A46		-132	16	OPT	30		J4-6	
A47		-131					J6-84	
A48		-130					J4-24	
A49		-129					J4-39	
A50		-128					J4-17	
A51		-127					J6-83	
A52		-126					J4-50	
A53		-125					J4-40	
A54		-124					J4-36	
A55		-123					J6-78	
A56		-122					J4-30	
A57		-121					J4-29	
A58		-120					J4-18	
A59		-119					J6-70	
A60		-118					J4-34	
A61		-117					J4-38	
A62		-116					J4-21	
A63		-115					J6-76	
A64		-114					J4-55	
A65		-113					-41	
A66		-112					-42	
A67		-111					-83	
A68		-110					-53	
A69		-109					-54	
A70		-108					-45	
A71		-107					-70	
A72		J12-106	16	OPT	30	AR	J4-60	

LEAD ELECTRICAL								
COND IDENT	REMARKS	FROM	SEE NOTE	COLOR	SIZE AWG	LENGTH	TO	REMARKS
A73		J12-105	16	OPT	30	AR	J4-56	
A74		-104	16	OPT	30		J4-56	
A75		-103	16	OPT	30		J3-76	
A76		-102	16	OPT	30		J1-17	
A77		-101	16	OPT	30		J2-24	
A78		-100	17	WHT	26		J1-18	
A79		-99	16	OPT	30		J2-70	
A80		-98	16	OPT	30		J2-40	
A81		-97	16	OPT	30		J1-36	
A82		-96	17	WHT	26		J3-6	
A83		-95	16	OPT	30		J2-84	
A84		-94	16	OPT	30		J3-22	
A85		-93	16	OPT	30		J3-30	
A86		-92	17	WHT	26		J3-8	
A87		-91	16	OPT	30		J2-83	
A88		-90	16	OPT	30		J3-39	
A89		-89	16	OPT	30		J3-43	
A90		-88	17	WHT	26		J3-38	
A91		-87	16	OPT	30		J1-76	
A92		-86	16	OPT	30		J3-56	
A93		-85	16	OPT	30		J3-42	
A94		-84	16	OPT	30		J3-34	
A95		-83	16	OPT	30		J1-74	
A96		-82	16	OPT	30		J3-50	
A97		-81	16	OPT	30		J3-55	
A98		-80	17	WHT	26		J3-60	
A99		-79	16	OPT	30		J1-70	
A100		-78	16	OPT	30		J3-41	
A101		-77	16	OPT	30		J3-29	
A102		-76	16	OPT	30		J3-54	
A103		-75	16	OPT	30		J3-49	
A104		-74	16	OPT	30		J6-79	
A105		-73	16	OPT	30		J5-76	
A106		-72	16	OPT	30		J3-53	
A107		-71	16	OPT	30		J2-60	
A108		-70	17	WHT	26		J2-6	
A109	SEE NOTE 10	-69	16	OPT	30		J2-18	SEE NOTE 11
A110		-68	16	OPT	30		J5-70	
A111		-67	16	OPT	30		J5-84	
A112		-66	16	OPT	30		J2-56	
A113		-65	16	OPT	30		J2-24	
A114		-64	16	OPT	30		J2-36	
A115		-63	17	WHT	26		J2-6	
A116		-62	16	OPT	30		J5-93	
A117		-61	16	OPT	30		J5-78	
A118		-60	16	OPT	30		J2-21	
A119		-59	16	OPT	30		J2-30	
A120		-58	16	OPT	30		J2-40	
A121		-57	16	OPT	30		J2-34	
A122		-56	16	OPT	30		J5-82	
A123		-55	16	OPT	30		J4-75	
A124		-54	16	OPT	30		J2-50	
A125		-53	16	OPT	30		J2-35	
A126		-52	16	OPT	30		J2-43	
A127		-51	16	OPT	30		J2-22	
A128		-50	16	OPT	30		J4-78	
A129		-48	16	OPT	30		J2-55	
A130		-47	16	OPT	30		J2-42	
A131		-46	16	OPT	30		J2-38	
A132		-45	16	OPT	30		J2-29	
A133		-44	16	OPT	30		J3-84	
A134		-43	16	OPT	30		J3-83	
A135		-42	16	OPT	30		J2-54	
A136		-41	16	OPT	30		J2-49	
A137		-40	16	OPT	30		J2-41	
A138		-39	16	OPT	30		J2-17	
A139		-38	16	OPT	30		J3-78	
A140		-37	16	OPT	30		J3-82	
A141		-36	16	OPT	30		J2-53	
A142		-35	16	OPT	30		J1-84	
A143		-34	16	OPT	30		J1-17	
A144		J12-33	17	WHT	26	AR	J1-6	

LEAD ELECTRICAL								
COND IDENT	REMARKS	FROM	SEE NOTE	COLOR	SIZE AWG	LENGTH	TO	REMARKS
A145	SEE NOTE 10	J12-32	16	OPT	30	AR	J2-78	SEE NOTE 10
A145		↑ -31		↑			J2-70	
A147		-30					J1-53	
A148		-29					↑ -36	
A149		-28					-21	
A150		-27					-22	
A151		-25					-84	
A152		-24					-29	
A153		-23					-39	
A154		-22					-34	
A155		-21					-30	
A156		-18					-55	
A157		-17					-43	
A158		-16					↑ -49	
A159		-15					J1-18	
A160		-13					J4-84	
A161		-12					J1-56	
A162		-11					↑ -50	
A163		-10					-41	
A164		-9					-40	
A165	-7					-83		
A166	-6					-60		
A167	-5					-54		
A168	-4					-38		
A169	↑ -3					-42		
A170	J12-1		OPT	30		J1-82		
A171	J12-183	17	WHT	26	AR	GI	SEE NOTE 13	

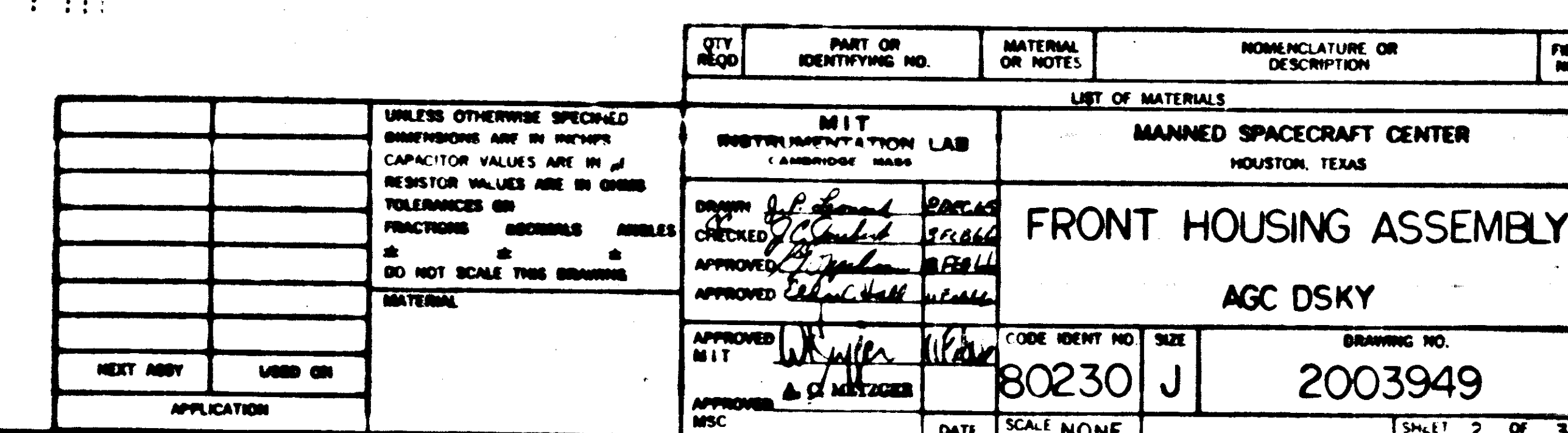
QTY REQD		PART OR IDENTIFYING NO.		REMARKS SCALEATURE OR C. IDENTIFY NO.	
LIST OF MATERIALS				MATERIALS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN TOLERANCES OR FRACTIONS = DECIMALS = ANGLES = DO NOT SCALE THIS DRAWING MATERIAL		INSTRUMENTATION LAB PLOT OR CONTRACT DRAWN BY DATE CHECKED BY		MAIN HOUSING ASSE AGC DSKY	
NEAT TREATMENT		NASA APPROVAL		CODE IDENT NO. SIZE	
FINISH FINISH		APPROVAL		802308 J	
APPLICATION		APPROVAL		SCALE NONE	



- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MOUNTING TORQUE FOR FIND NO. 24 TO BE 2.5 TO 3.0 FT-LBS
 3. IDENTIFY WITH PART NO. PER ND1002019
 4. ENCAPSULATE INDICATED AREAS PER ND1002236
 5. SOLDER PER ND1002071 USING SOLDER PER ND1002075
 6. WELD PER ND1002005
 7. AS DE NOTES AS REQUIRED
 8. BOND FIND NO. 32, 33, 38, 40 & 41 TO FIND NO. 39 PER ND1002004, TYPE III
 9. DRESS AND TRIM AT ASSEMBLY USING FIND NO. 34
 10. SOLDER FIND NO. 37 TO FIND NO. 1 PER ND1002004, TYPE III
 11. APPLY FIND NO. 36 TO INDICATED SURFACES OF FIND NO. 2. DO NOT APPLY TO BONDED RUBBER
 12. MARK .0750 HIGH BLACK CHARACTERS PER ND1002019 AND ND1002122 TYPE III CLASS 2 USING MARKING INK 1006271-11
 13. MOUNTING TORQUE FOR FIND NO. 37 TO BE 15-20 INCH OUNCES
 14. SEAL INSULATORS ON FIND NO. 4 PER ND1002004 TYPE III
 15. MOUNTING TORQUE FOR FIND NO. 30 TO BE 3.5-4.5 INCH POUNDS
 16. MOUNTING TORQUE FOR FIND NO. 28 AND FIND NO. 29 TO BE 8 TO 10 INCH POUNDS
 17. ENCAPSULATE PER ND
 18. SOLDER FIND NO. 39 & WIRES FROM S1 THRU S19 TO FIND NO. 1 PER ND1002004, TYPE III

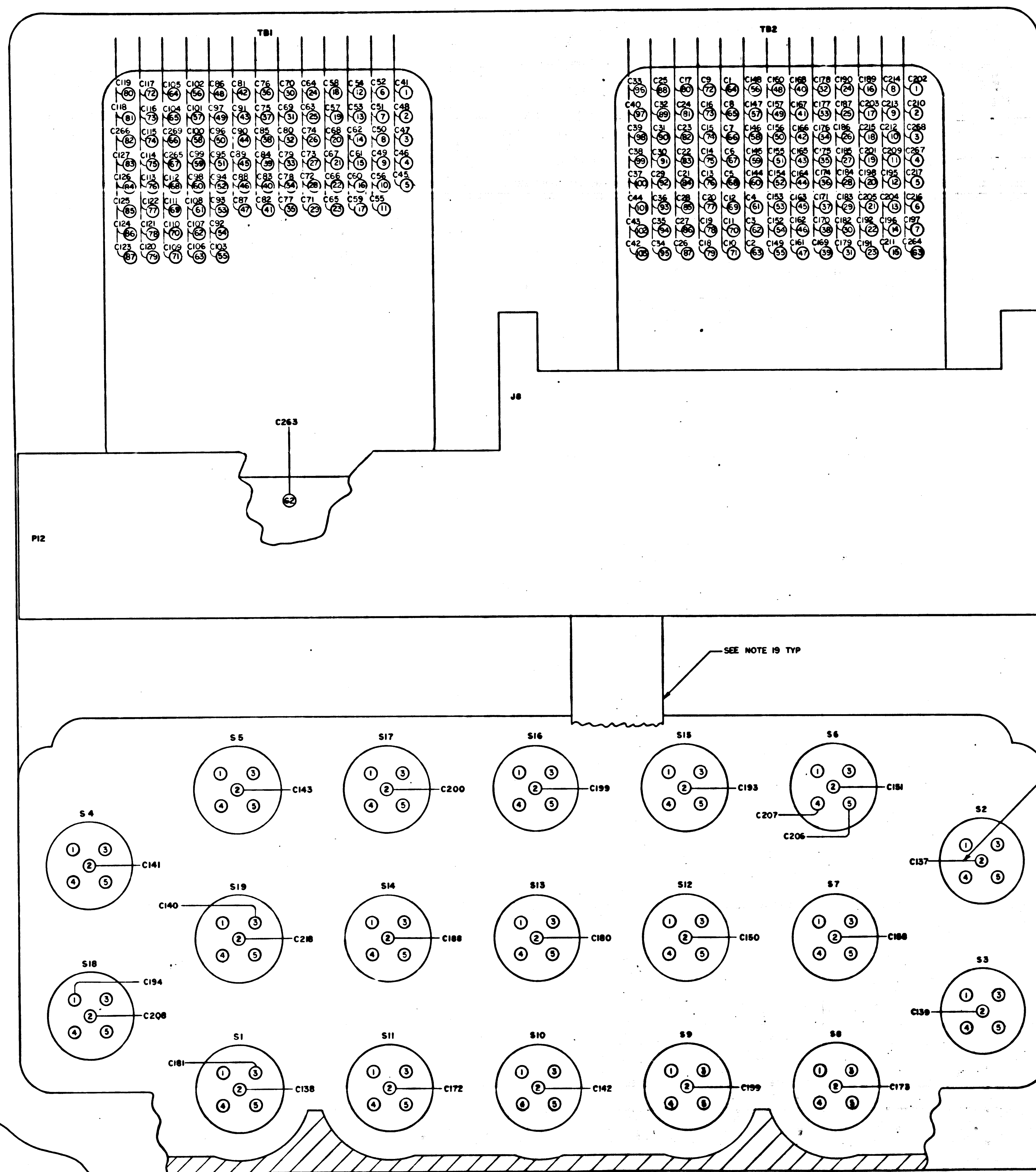
2005953	INTERCONNECTING DIAGRAM	REF
AR 1010807-22	WIRE, INSULATED	41
AR 1010416-14	WIRE, INSULATED	40
I 2004898	SUPPORT, WIRE	39
AR 1010416-13	WIRE, INSULATED	38
2004039	TERMINAL, THREADED	37
AR 1006879	SILICONE COMPOUND	36
AR 1010416-15	WIRE, INSULATED	35
AR 1012507-003	TAPE, LACING	34
AR 1010416-20	WIRE, INSULATED	33
AR 1010846-1	WIRE, INSULATED	32
4 NAS620-6L	WASHER, FLAT	31
13 MS51959-20	SCREW, FLAT HD, CROSS RECESSED	30
4 MS51957-30	SCREW, PAN HD, CROSS RECESSED	29
2 MS51959-28	SCREW, FLAT HD, CROSS RECESSED	28
19 1010635-003	WASHER, LOCK	27
19 2004940	WASHER, PLAIN	26
19 1000159-7	O-RING, SEAL	25
19 2004942	NUT, HEX	24
I 2003984-211	SWITCH, ASSEMBLY PUSHBUTTON	23
I -191		22
I -181		21
I -171		20
I -161		19
I -151		18
I -141		17
I -131		16
I -121		15
I -111		14
I -091		13
I -081		12
I -071		11
I -061		10
I -051		9
I -041		8
I -031		7
I -021		6
I 2003984-011	SWITCH, ASSEMBLY PUSHBUTTON	5
I 2003948-011	CONNECTOR, PLATE ASSEMBLY	4
I 2003959-011	ADAPTER, PLATE ASSEMBLY	3
2 1006331	GASKET, PREFORMED	2
I 2004968-011	HOUSING, FRONT	1
QTY REQ	PART OR IDENTIFYING NO.	FIND NO.
011	LIST OF MATERIALS	

INSTRUMENTATION LAB CAMBRIDGE, MASS		MANUFACTURED SPACECRAFT CENTER HOUSTON, TEXAS	
DESIGN: [Signature] CHECKED: [Signature] APPROVED: [Signature]		FRONT HOUSING ASSEMBLY AGC DSKY	
2003950 NEXT ASSY USED ON APPLICATION		CODE IDENT NO. 80230 J DATE 1/1 SCALE 1/1 DRAWING NO. 2003949 SHEET 1 OF 3	



2003949 C

REVISIONS		REV	DATE	BY	CHK	DATE	APP
A	REVISED PER TDRR 26856	1/1	7/78	W			
B	REVISED PER TDRR 27913	1/1	1/78	W			
C	REVISED PER TDRR 28178	1/1	1/78	W			



SEE NOTE 9

MASTER

2003949 C

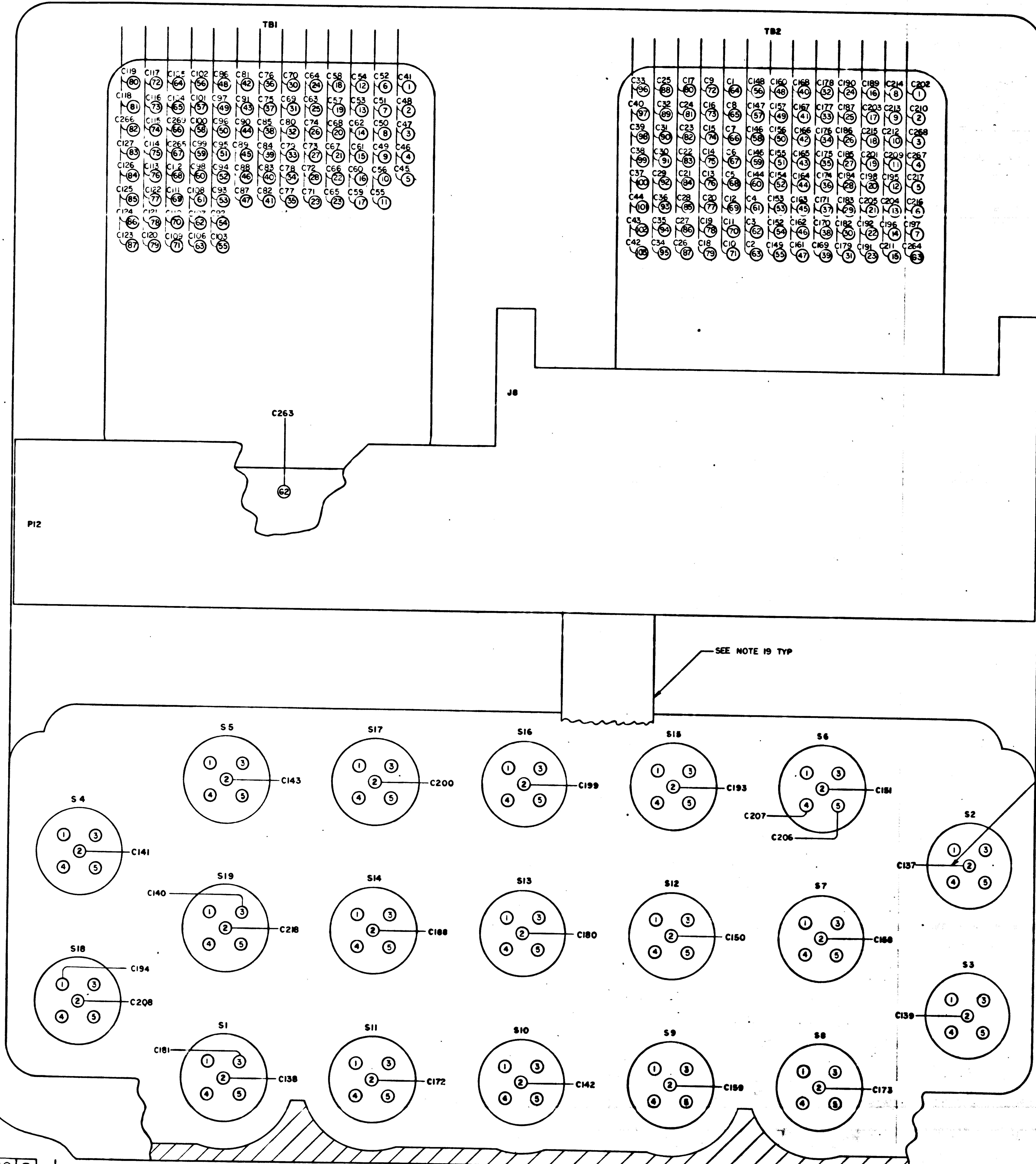
2003949 C

A

QTY	REQD	PART OR IDENTIFYING NO.	MATERIAL OR NOTES	NOMENCLATURE OR DESCRIPTION	PO #
MIT INSTRUMENTATION LAB					
LIST OF MATERIALS					
MANNED SPACECRAFT CENTER					
IDENTIFYING NO.					
FRONT HOUSING ASSEMBLY					
AGC DSKY					
DRAWN BY: [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]					
DATE: 1/1/78					
CODE IDENT NO. 80230 J					
ISSUE NO. 2003949					
SHEET 2 OF 2					

2003949 D

REVISED		REVISIONS		DATE		APPROVED BY	
A	REVISED PER TORR 26856	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77
B	REVISED PER TORR 27913	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77
C	REVISED PER TORR 28178	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77
D	REVISED PER TORR 29705	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77	1/21/77



2003949 D

MASTER

TEST APP	USED ON	APPLICATION
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UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
CAPACITOR VALUES ARE IN OHMS
TOLERANCE ON
FRACTIONS DECIMALS AREAS
AS NOTED
DO NOT SCALE THIS DRAWING
NOTES

MIT	MIT	MIT	MIT
ENGINEERING LAB	ENGINEERING LAB	ENGINEERING LAB	ENGINEERING LAB
CHIEF: [Signature]	CHIEF: [Signature]	CHIEF: [Signature]	CHIEF: [Signature]
APPROVED: [Signature]	APPROVED: [Signature]	APPROVED: [Signature]	APPROVED: [Signature]
DATE: 1/21/77	DATE: 1/21/77	DATE: 1/21/77	DATE: 1/21/77
SCALE: NONE	SCALE: NONE	SCALE: NONE	SCALE: NONE
CODE: 80230 J	CODE: 80230 J	CODE: 80230 J	CODE: 80230 J
DRIVING NO: 2003949	DRIVING NO: 2003949	DRIVING NO: 2003949	DRIVING NO: 2003949
SHEET 2 OF 3	SHEET 2 OF 3	SHEET 2 OF 3	SHEET 2 OF 3

F-272

5003949

2003949

REV	DATE	BY	APP
A		PE VI	
B		PE VI	
C		PE VI	
D		PE VI	

D

C

B

A

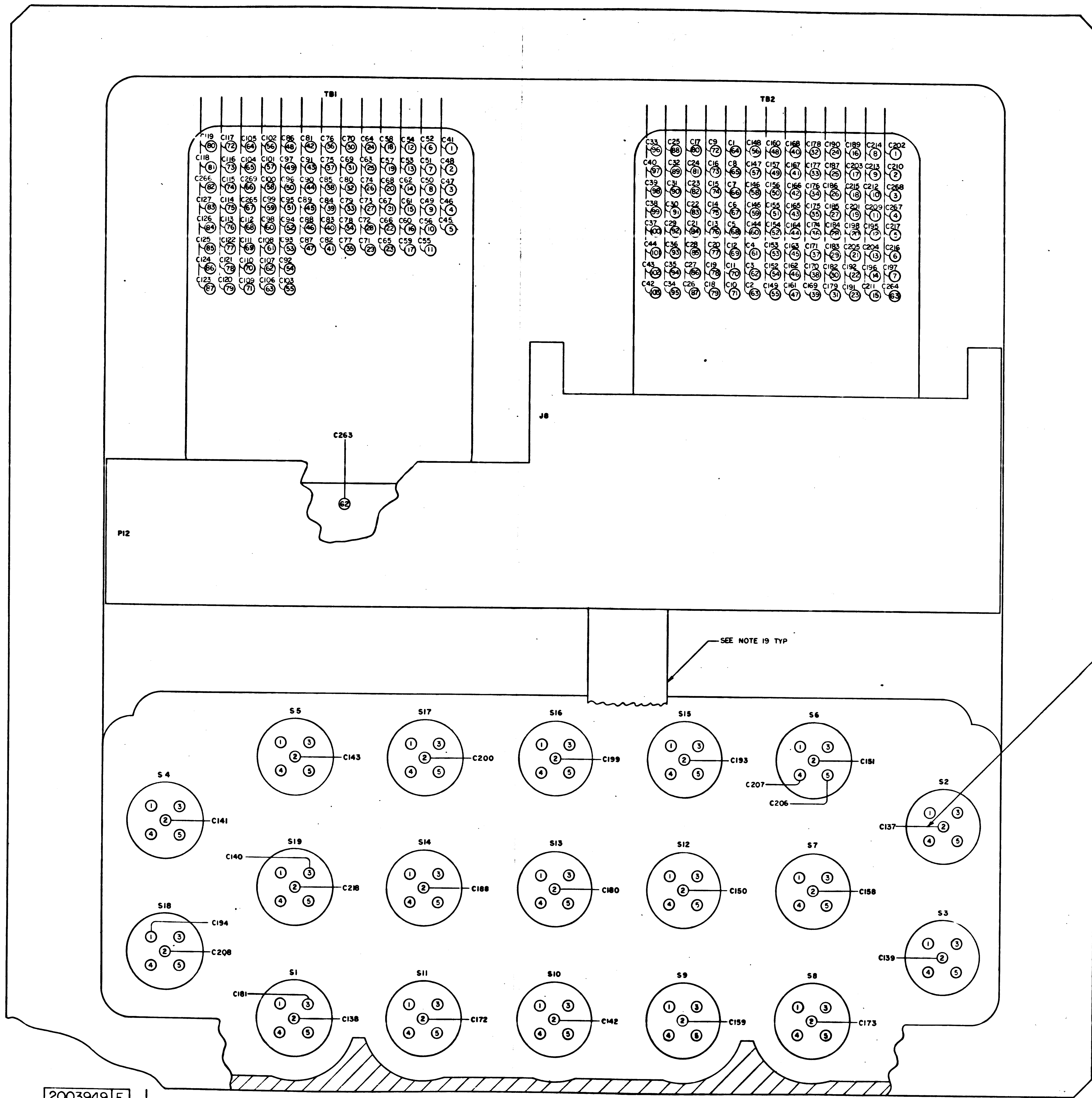
2003949 E

SH 2 / 3

2003949

E

F 1 / 2



SEE NOTE 9

REV	DATE	BY	APP
A		PE VI	
B		PE VI	
C		PE VI	
D		PE VI	

DESIGNED BY	PE VI
DRAWN BY	PE VI
CHECKED BY	PE VI
APPROVED BY	PE VI
DATE	

TESTED BY	PE VI
DATE	

REVISIONS	DATE	BY	APP
1		PE VI	

	1. NAME AND SURNAME OF THE INSURED 2. DATE OF BIRTH AND AGE 3. RESIDENCE ADDRESS AND IN- SURANCE POLICY NUMBER 4. TYPE OF INSURANCE 5. PREMIUM AMOUNT 6. DATE OF NEXT PREMIUM 7. NAME OF AGENT	8. NAME OF THE INSURANCE COMPANY 9. TYPE OF INSURANCE 10. DATE OF NEXT PREMIUM 11. NAME OF AGENT 12. NAME OF THE INSURANCE COMPANY 13. TYPE OF INSURANCE 14. DATE OF NEXT PREMIUM 15. NAME OF AGENT
NEXT AGENT (PRINT NAME)	(PRINT NAME)	(PRINT NAME)

LEAD ELECTRICAL					
FROM	FIND NO.	OLOR	SIZE AWG	LENGTH	TO
P12-131	32	WHT	26	AR	TB2-64
-132					TB2-63
-134					TB2-62
-27					TB2-61
-128					TB2-60
-129					TB2-59
-130					TB2-58
-123					TB2-57
-124					TB2-56
-125					TB2-55
-126					TB2-54
-127					TB2-53
-128					TB2-52
-129					TB2-51
-130					TB2-50
-131					TB2-49
-132					TB2-48
-133					TB2-47
-134					TB2-46
-135					TB2-45
-136					TB2-44
-137					TB2-43
-138					TB2-42
-139					TB2-41
-140					TB2-40
-141					TB2-39
-142					TB2-38
-143					TB2-37
-144					TB2-36
-145					TB2-35
-146					TB2-34
-147					TB2-33
-148					TB2-32
-149					TB2-31
-150					TB2-30
-151					TB2-29
-152					TB2-28
-153					TB2-27
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-162					TB2-18
-163					TB2-17
-164					TB2-16
-165					TB2-15
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-266					TB2-0
-267					TB2-0
-268					TB2-0
-269					TB2-0

LEAD ELECTRICAL					
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG
C89		P12-46	32	WHT	26
C90		-47			
C91		-48			
C92		-49			
C93		-50			
C94		-51			
C95		-52			
C96		-53			
C97		-54			
C98		-55			
C99		-56			
C100		-57			
C101		-58			
C102		-59			
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C104		-61			
C105		-62			
C106		-63			
C107		-64			
C108		-65			
C109		-66			
C110		-67			
C111		-68			
C112		-69			
C113		-70			
C114		-71			
C115		-72			
C116		-73			
C117		-74			
C118		-75			
C119		-76			
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C124		-81			
C125		-82			
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C143		-100			
C144		-101			
C145		-102			
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C166		-123			
C167		-124			
C168		-125			
C169		-126			
C170		-127			
C171		-128			
C172		-129			
C173		-130			
C174		-131			
C175		-132			
C176		-133			

LEAD ELECTRICAL					
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG
C177		P12-162	32	WHT	26
C178	SEE NOTE 6	P12-163	32		
C179		P12-164	32		
C180	SEE NOTE 5	J8-20	33		
C181		J8-21	33		
C182		P12-165	32		
C183		-166			
C184	SEE NOTE 6	-167			
C185		-168			
C186		-169			
C187		P12-170	32		
C188	SEE NOTE 5	J8-22	33		
C189		P12-190	32		
C190	SEE NOTE 6	-174			
C191		-175			
C192		P12-176	32		
C193	SEE NOTE 5	J8-24	33		
C194		J8-25	33		
C195		P12-196	32		
C196	SEE NOTE 6	-192			
C197		-204			
C198		P12-182	32		
C199	SEE NOTE 5	J8-26	33		
C200		J8-27	33		
C201		P12-185	32		
C202		-210			
C203	SEE NOTE 6	-187			
C204		-192			
C205		-181			
C206		-193	32	WHT	
C207	SEE NOTE 5	P12-194	32	ORN	
C208		J8-20	33	WHT	
C209		P12-187	32	WHT	
C210		-203			
C211	SEE NOTE 6	-191			
C212		-201			
C213		-202			
C214		-203			
C215		-186			
C216		-207			
C217		-208	32	WHT	
C218		P12-179	33	WHT	
C219		S1-1	35	YEL	
C220		S2-1			
C221		S3-1			
C222		S4-1			
C223		S5-1			
C224		S6-1			
C225		S7-1			
C226		S8-1			
C227		S9-1			
C228		S10-1			
C229		S11-1			
C230		S12-1			
C231		S13-1			
C232		S14-1			
C233	SEE NOTE 5	S15-1	35	YEL	
C234		S17-4	38	RED	
C235		S17-5	40	ORN	
C236		S6-4	38	RED	
C237		S6-5	40	ORN	
C238		S2-4	38	RED	
C239		S2-5	40	ORN	
C240		S7-4	38	RED	
C241		S7-5	40	ORN	
C242		S3-4	38	RED	
C243		S3-5	40	ORN	
C244		S8-4	38	RED	
C245		S8-5	40	ORN	
C246		S9-4	38	RED	
C247		S9-5	40	ORN	
C248		S12-4	38	RED	
C249		S12-5	40	ORN	
C250		S15-4	38	RED	
C251		S15-5	40	ORN	
C252		S16-4	38	RED	
C253		S16-5	40	ORN	
C254		S13-4	38	RED	
C255		S13-5	40	ORN	
C256		S10-4	38	RED	
C257		S10-5	40	ORN	
C258		S11-4	38	RED	
C259		S11-5	40	ORN	
C260		S14-4	38	RED	
C261		S14-5	40	ORN	
C262		S17-1	35	YEL	
C263	SEE NOTE 6	P12-184	32	WHT	
C264	SEE NOTE 6	P12-183	32		
C265		P12-20	32		
C266	SEE NOTE 6	P12-8			
C267		P12-173			
C268		P12-177			
C269		P12-19	32	WHT	26
					AR
					TB2-33
					TB2-32
					TB2-31
					S1-3
					TB2-30
					-29
					-28
					-27
					-26
					TB2-25
					S14-2
					TB2-16
					-24
					-23
					TB2-22
					S15-2
					S16-1
					TB2-12
					-14
					-7
					TB2-20
					S16-2
					S17-2
					TB2-19
					-1
					-17
					-13
					TB2-21
					S6-5
					S18-4
					TB2-11
					-2
					-15
					-10
					-9
					-8
					-18
					-6
					TB2-5
					S19-2
					S2-3
					S2-2
					S4-3
					S5-3
					S6-3
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					S19-5
					S20-5
					S11-4
					S11-5
					S14-4
					S14-5
					TB1-87
					TB1-82
					TB2-4
					TB2-3
					TB1-66
					AR
					26
					WHT
					32
					WHT
					32
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					WHT
					32

LEAD ELECTRICAL						
FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
P12-131	32	WHT	26	AR	TB2-64	
-132					TB2-63	
-133					TB2-62	
-134					TB2-61	
-127					TB2-68	
-128					TB2-67	
-129					TB2-66	
-130					TB2-65	
-123					TB2-72	
-124					TB2-70	
-125					TB2-69	
-119					TB2-76	
-120					TB2-75	
-121					TB2-74	
-122					TB2-73	
-115					TB2-80	
-116					TB2-79	
-117					TB2-78	
-118					TB2-77	
-111					TB2-84	
-112					TB2-83	
-113					TB2-82	
-114					TB2-81	
-107					TB2-88	
-108					TB2-87	
-109					TB2-86	
-110					TB2-85	
-103					TB2-92	
-104					TB2-91	
-105					TB2-90	
-106					TB2-89	
-100					TB2-96	
-101					TB2-95	
-102					TB2-94	
-95					TB2-98	
-96					TB2-97	
-97					TB2-96	
-98					TB2-95	
-91					TB2-97	
-92					TB1-1	
-93					TB2-103	
-94					TB2-102	
-87					TB2-101	SEE NOTE 6
-88					TB1-5	
-89					TB1-4	
-90					TB1-3	
-83					TB1-2	
-84					TB1-9	
-85					TB1-7	
-86					TB1-6	
-79					TB1-13	
-80					TB1-12	
-81					TB1-11	
-82					TB1-10	
-74					TB1-18	
-75					TB1-17	
-76					TB1-16	
-77					TB1-15	
-78					TB1-14	
-67					TB1-23	
-68					TB1-22	
-69					TB1-24	
-70					TB1-25	
-71					TB1-21	
-72					TB1-20	
-61					TB1-31	
-62					TB1-30	
-63					TB1-29	
-64					TB1-28	
-65					TB1-26	
-55					TB1-37	
-56					TB1-36	
-57					TB1-35	
-58					TB1-34	
-59					TB1-33	
-50					TB1-42	
-51					TB1-41	
-52					TB1-40	
-53					TB1-39	
-54					TB1-38	
-43					TB1-47	
-44					TB1-46	
P12-45	32	WHT	26	AR	TB1-45	

LEAD ELECTRICAL						
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH
C89		P12-46	32	WHT	26	AR
C90		-47				TB1-45
C91		-48				TB1-44
C92		-37				TB1-54
C93		-38				TB1-53
C94		-39				TB1-52
C95		-40				TB1-51
C96		-41				TB1-50
C97		-42				TB1-49
C98		-31				TB1-60
C99		-32				TB1-59
C100		-33				TB1-58
C101		-34				TB1-57
C102		-35				TB1-56
C103		-36				TB1-55
C104		-25				TB1-64
C105		-27				TB1-63
C106	SEE NOTE 6	-28				TB1-62
C107		-29				TB1-61
C108		-30				TB1-60
C109		-22				TB1-70
C110		-23				TB1-69
C111		-24				TB1-68
C112		-13				TB1-76
C113		-15				TB1-75
C114		-16				TB1-74
C115		-17				TB1-73
C116		-18				TB1-72
C117		-9				TB1-81
C118		-10				TB1-80
C119		-11				TB1-79
C120		-12				TB1-78
C121		-1				TB1-77
C122		-3				TB1-86
C123		-4				TB1-85
C124		-5				TB1-84
C125		P12-6	32	WHT	26	AR
C126		TB1-83				TB1-82
C127		S16-1	35	YEL		TB1-81
C128		S5-4	38	RED		TB1-80
C129		S5-5	40	ORN		TB1-79
C130		S19-4	38	RED		TB1-78
C131		S19-5	40	ORN		TB1-77
C132		S1-4	38	RED		TB1-76
C133		S1-5	40	ORN		TB1-75
C134		S18-4	38	RED		TB1-74
C135		S18-5	40	ORN		TB1-73
C136	SEE NOTE 5	S18-6	40	ORN		TB1-72
C137		J8-3	33	WHT		TB1-71
C138		-5				TB1-70
C139		-8				TB1-69
C140		-9				TB1-68
C141		-10				TB1-67
C142		-11				TB1-66
C143		J8-13	33	WHT		TB1-65
C144		P12-135	32	WHT	26	AR
C145		-136				TB2-59
C146		-137				TB2-58
C147		-138				TB2-57
C148	SEE NOTE 6	-139				TB2-56
C149		P12-140	32	WHT	26	AR
C150		J8-14	33	WHT		TB2-55
C151	SEE NOTE 5	J8-15	33	WHT		TB2-54
C152		P12-141	32	WHT	26	AR
C153		-142				TB2-53
C154		-143				TB2-52
C155	SEE NOTE 6	-144				TB2-51
C156		-145				TB2-50
C157		P12-146	32	WHT	26	AR
C158		J8-16	33	WHT		TB2-49
C159	SEE NOTE 5	J8-17	33	WHT		TB2-48
C160		P12-147	32	WHT	26	AR
C161		-148				TB2-47
C162		-149				TB2-46
C163		-150				TB2-45
C164		-151				TB2-44
C165		-152				TB2-43
C166	SEE NOTE 6	-153				TB2-42
C167		-154				TB2-41
C168		-155				TB2-40
C169		-156				TB2-39
C170		-157				TB2-38
C171		P12-158	32	WHT	26	AR
C172	SEE NOTE 5	J8-18	33	WHT		TB2-37
C173		J8-19	33	WHT		TB2-36
C174		P12-159	32	WHT	26	AR
C175	SEE NOTE 6	P12-160	32	WHT	26	AR
C176		P12-161	32	WHT	26	AR

LEAD ELECTRICAL								
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
C177		P12-162	32	WHT	26	AR	TB2-33	
C178	SEE NOTE 6	P12-163	32				TB2-32	SEE NOTE 6
C179		P12-164	32				TB2-31	
C180	SEE NOTE 5	J8-20	33				S13-2	SEE NOTE 5
C181		J8-21	33				S1-3	
C182		P12-165	32				TB2-30	
C183		-166					-29	
C184	SEE NOTE 6	-167					-28	SEE NOTE 6
C185		-168					-27	
C186		-169					-26	
C187		P12-170	32				TB2-25	
C188	SEE NOTE 5	J8-22	33				S14-2	SEE NOTE 5
C189		P12-190	32				TB2-16	
C190		-174					-24	
C191	SEE NOTE 6	-175					-23	SEE NOTE 6
C192		P12-176	32				TB2-22	
C193	SEE NOTE 5	J8-24	33				S15-2	SEE NOTE 5
C194		J8-25	33				S18-1	
C195	SEE NOTE 6	P12-196	32				TB2-12	SEE NOTE 6
C196		-192					-14	
C197		-204					-7	
C198		P12-182	32				TB2-20	
C199	SEE NOTE 5	J8-26	33				S16-3	SEE NOTE 5
C200		J8-27	33				S17-2	
C201		P12-185	32				TB2-19	
C202	SEE NOTE 6	-210					-1	SEE NOTE 6
C203		-187					-17	
C204		-195					-13	
C205		-181	32	WHT			TB2-21	
C206	SEE NOTE 8	-193	40	ORN			S6-5	SEE NOTE 8
C207		P12-194	38	RED			S2-4	
C208		J8-30	33	WHT			S18-2	
C209		P12-197	32	WHT			TB2-11	
C210		-209					-2	
C211		-191					-15	
C212	SEE NOTE 6	-201					-10	SEE NOTE 6
C213		-202					-9	
C214		-203					-8	
C215		-186					-18	
C216		-207					-6	
C217		-208	32	WHT			TB2-5	
C218		P12-179	33	WHT			S19-2	
C219		S1-1	35	YEL			S2-5	
C220		S3-1					S3-3	
C221		S4-1					S4-3	
C222		S5-1					S5-3	
C223		S6-1					S6-3	
C224		S7-1					S7-3	
C225		S8-1					S8-3	
C226		S9-1					S9-3	
C227		S10-1					S10-3	
C228		S11-1					S11-3	
C229		S12-1					S12-3	
C230		S13-1					S13-3	
C231		S14-1					S14-3	
C232		S15-1					S15-3	
C233	SEE NOTE 5	S17-4	38	RED			S16-3	SEE NOTE 5
C234		S17-5	40	ORN			S17-3	
C235		S6-4	38	RED			S5-5	
C236		S6-5	40	ORN			S6-4	
C237		S2-4	38	RED			S7-4	
C238		S2-5	40	ORN			S7-5	
C239		S7-4	38	RED			S3-4	
C240		S7-5	40	ORN			S3-5	
C241		S3-4	38	RED			S8-4	
C242		S3-5	40	ORN			S8-5	
C243		S8-4	38	RED			S9-4	
C244		S8-5	40	ORN			S9-5	
C245		S9-4	38	RED			S2-4	
C246		S9-5	40	ORN			S2-5	
C247		S10-4	38	RED			S15-4	
C248		S10-5	40	ORN			S15-5	
C249		S11-4	38	RED			S16-4	
C250		S11-5	40	ORN			S17-4	
C251		S14-4	38	RED			S17-5	
C252		S14-5	40	ORN			S18-3	
C253	SEE NOTE 3	P12-184	32	WHT			62	SEE NOTE 3
C254	SEE NOTE 6	P12-183	41				63	SEE NOTE 6
C255		P12-18	32				TB1-67	
C256	SEE NOTE 6	P12-17					TB1-82	SEE NOTE 6
C257		P12-177					TB1-4	
C258		P12-177					TB2-3	
C259		P12-19	32	WHT	26	AR	TB1-66	

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REVISED PER DRR 26856	DATE	BY
REVISED PER DRR 27913	DATE	BY

LEAD ELECTRICAL						
REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO
	P12-131	32	WHT	26	AR	TB2-64
	-132					TB2-63
	-133					TB2-62
	-134					TB2-61
	-137					TB2-60
	-128					TB2-59
	-129					TB2-58
	-130					TB2-57
	-123					TB2-56
	-124					TB2-55
	-125					TB2-54
	-126					TB2-53
	-127					TB2-52
	-128					TB2-51
	-129					TB2-50
	-130					TB2-49
	-131					TB2-48
	-132					TB2-47
	-133					TB2-46
	-134					TB2-45
	-135					TB2-44
	-136					TB2-43
	-137					TB2-42
	-138					TB2-41
	-139					TB2-40
	-140					TB2-39
	-141					TB2-38
	-142					TB2-37
	-143					TB2-36
	-144					TB2-35
	-145					TB2-34
	-146					TB2-33
	-147					TB2-32
	-148					TB2-31
	-149					TB2-30
	-150					TB2-29
	-151					TB2-28
	-152					TB2-27
	-153					TB2-26
	-154					TB2-25
	-155					TB2-24
	-156					TB2-23
	-157					TB2-22
	-158					TB2-21
	-159					TB2-20
	-160					TB2-19
	-161					TB2-18
	-162					TB2-17
	-163					TB2-16
	-164					TB2-15
	-165					TB2-14
	-166					TB2-13
	-167					TB2-12
	-168					TB2-11
	-169					TB2-10
	-170					TB2-9
	-171					TB2-8
	-172					TB2-7
	-173					TB2-6
	-174					TB2-5
	-175					TB2-4
	-176					TB2-3
	-177					TB2-2
	-178					TB2-1
	-179					TB2-0
	-180					TB2-0
	-181					TB2-0
	-182					TB2-0
	-183					TB2-0
	-184					TB2-0
	-185					TB2-0
	-186					TB2-0
	-187					TB2-0
	-188					TB2-0
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	-190					TB2-0
	-191					TB2-0
	-192					TB2-0
	-193					TB2-0
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	-200					TB2-0
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	-202					TB2-0
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	-230					TB2-0
	-231					TB2-0
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	-255					TB2-0
	-256					TB2-0
	-257					TB2-0
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	-261					TB2-0
	-262					TB2-0
	-263					TB2-0
	-264					TB2-0
	-265					TB2-0
	-266					TB2-0
	-267					TB2-0
	-268					TB2-0
	-269					TB2-0

LEAD ELECTRICAL						
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH
C89		P12-46	32	WHT	26	AR
C90		-47				TB1-45
C91		-48				TB1-44
C92		-49				TB1-43
C93		-50				TB1-42
C94		-51				TB1-41
C95		-52				TB1-40
C96		-53				TB1-39
C97		-54				TB1-38
C98		-55				TB1-37
C99		-56				TB1-36
C100		-57				TB1-35
C101		-58				TB1-34
C102		-59				TB1-33
C103		-60				TB1-32
C104		-61				TB1-31
C105		-62				TB1-30
C106		-63				TB1-29
C107		-64				TB1-28
C108		-65				TB1-27
C109		-66				TB1-26
C110		-67				TB1-25
C111		-68				TB1-24
C112		-69				TB1-23
C113		-70				TB1-22
C114		-71				TB1-21
C115		-72				TB1-20
C116		-73				TB1-19
C117		-74				TB1-18
C118		-75				TB1-17
C119		-76				TB1-16
C120		-77				TB1-15
C121		-78				TB1-14
C122		-79				TB1-13
C123		-80				TB1-12
C124		-81				TB1-11
C125		-82				TB1-10
C126		-83				TB1-9
C127		-84				TB1-8
C128		-85				TB1-7
C129		-86				TB1-6
C130		-87				TB1-5
C131		-88				TB1-4
C132		-89				TB1-3
C133		-90				TB1-2
C134		-91				TB1-1
C135		-92				TB1-0
C136		-93				TB1-0
C137		-94				TB1-0
C138		-95				TB1-0
C139		-96				TB1-0
C140		-97				TB1-0
C141		-98				TB1-0
C142		-99				TB1-0
C143		-100				TB1-0
C144		-101				TB1-0
C145		-102				TB1-0
C146		-103				TB1-0
C147		-104				TB1-0
C148		-105				TB1-0
C149		-106				TB1-0
C150		-107				TB1-0
C151		-108				TB1-0
C152		-109				TB1-0
C153		-110				TB1-0
C154		-111				TB1-0
C155		-112				TB1-0
C156		-113				TB1-0
C157		-114				TB1-0
C158		-115				TB1-0
C159		-116				TB1-0
C160		-117				TB1-0
C161		-118				TB1-0
C162		-119				TB1-0
C163		-120				TB1-0
C164		-121				TB1-0
C165		-122				TB1-0
C166		-123				TB1-0
C167		-124				TB1-0
C168		-125				TB1-0
C169		-126				TB1-0
C170		-127				TB1-0
C171		-128				TB1-0
C172		-129				TB1-0
C173		-130				TB1-0
C174		-131				TB1-0
C175		-132				TB1-0
C176		-133				TB1-0

LEAD ELECTRICAL						
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH
C177		P12-162	32	WHT	26	AR
C178		-163				TB2-33
C179		-164				TB2-32
C180		-165				TB2-31
C181		-166				TB2-30
C182		-167				TB2-29
C183		-168				TB2-28
C184		-169				TB2-27
C185		-170				TB2-26
C186		-171				TB2-25
C187		-172				TB2-24
C188		-173				TB2-23
C189		-174				TB2-22
C190		-175				TB2-21
C191		-176				TB2-20
C192		-177				TB2-19
C193		-178				TB2-18
C194		-179				TB2-17
C195		-180				TB2-16
C196		-181				TB2-15
C197		-182				TB2-14
C198		-183				TB2-13
C199		-184				TB2-12
C200		-185				TB2-11
C201		-186				TB2-10
C202		-187				TB2-9
C203		-188				TB2-8
C204		-189				TB2-7
C205		-190				TB2-6
C206		-191				TB2-5
C207		-192				TB2-4

2003949 C

REVISIONS					
NO.	DATE	BY	CHK	APP	DESCRIPTION
A					REVISED PER DRR 26856
B					REVISED PER DRR 27913
C					REVISED PER DRR 28178

LEAD ELECTRICAL						
FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
P12-131	32	WHT	26	AR	TB2-64	
-132					TB2-63	
-133					TB2-62	
-134					TB2-61	
-127					TB2-68	
-128					TB2-67	
-129					TB2-66	
-130					TB2-65	
-23					TB2-72	
-24					TB2-71	
-25					TB2-70	
-26					TB2-69	
-27					TB2-76	
-28					TB2-75	
-29					TB2-74	
-30					TB2-73	
-31					TB2-80	
-32					TB2-79	
-33					TB2-78	
-34					TB2-77	
-35					TB2-84	
-36					TB2-83	
-37					TB2-82	
-38					TB2-81	
-39					TB2-88	
-40					TB2-87	
-41					TB2-86	
-42					TB2-85	
-43					TB2-92	
-44					TB2-91	
-45					TB2-90	
-46					TB2-89	
-47					TB2-96	
-48					TB2-95	
-49					TB2-94	
-50					TB2-93	
-51					TB2-100	
-52					TB2-99	
-53					TB2-98	
-54					TB2-97	
-55					TB1-1	
-56					TB2-103	
-57					TB2-102	
-58					TB2-101	
-59					TB1-5	
-60					TB1-4	
-61					TB1-3	
-62					TB1-2	
-63					TB1-9	
-64					TB1-8	
-65					TB1-7	
-66					TB1-6	
-67					TB1-13	
-68					TB1-12	
-69					TB1-11	
-70					TB1-10	
-71					TB1-19	
-72					TB1-18	
-73					TB1-17	
-74					TB1-16	
-75					TB1-15	
-76					TB1-14	
-77					TB1-25	
-78					TB1-24	
-79					TB1-23	
-80					TB1-22	
-81					TB1-21	
-82					TB1-20	
-83					TB1-30	
-84					TB1-29	
-85					TB1-28	
-86					TB1-27	
-87					TB1-26	
-88					TB1-37	
-89					TB1-36	
-90					TB1-35	
-91					TB1-34	
-92					TB1-33	
-93					TB1-32	
-94					TB1-42	
-95					TB1-41	
-96					TB1-40	
-97					TB1-39	
-98					TB1-38	
-99					TB1-48	
-100					TB1-47	
P12-45	32	WHT	26	AR	TB1-46	

LEAD ELECTRICAL						
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH
C89		P12-46	32	WHT	26	AR
C90		-47				TB1-45
C91		-48				TB1-44
C92		-37				TB1-43
C93		-36				TB1-54
C94		-35				TB1-53
C95		-40				TB1-52
C96		-41				TB1-51
C97		-42				TB1-50
C98		-31				TB1-60
C99		-32				TB1-59
C100		-33				TB1-58
C101		-34				TB1-57
C102		-35				TB1-56
C103		-36				TB1-57
C104		-25				TB1-65
C105		-27				TB1-64
C106		-28				TB1-63
C107		-29				TB1-62
C108		-30				TB1-61
C109		-21				TB1-71
C110		-22				TB1-70
C111		-23				TB1-69
C112		-24				TB1-68
C113		-13				TB1-76
C114		-15				TB1-75
C115		-16				TB1-74
C116		-17				TB1-73
C117		-18				TB1-72
C118		-7				TB1-81
C119		-9				TB1-80
C120		-10				TB1-79
C121		-11				TB1-78
C122		-12				TB1-77
C123		-1				TB1-87
C124		-3				TB1-86
C125		-4				TB1-85
C126		-5				TB1-84
C127		P12-6	32	WHT		TB1-83
C128		S16-1	35	YEL		S17-3
C129		S5-4	38	RED		S19-4
C130		S5-5	40	ORN		S19-5
C131		S19-4	38	RED		S19-4
C132		S19-5	40	ORN		S19-5
C133		S1-4	38	RED		S18-4
C134		S1-5	40	ORN		S18-5
C135		S18-4	38	RED		S4-4
C136		S18-5	40	ORN		S4-5
C137		J8-3	33	WHT		S2-2
C138		-5				S1-2
C139		-8				S3-2
C140		-9				S19-3
C141		-10				S4-2
C142		-11				S10-2
C143		J8-13	33			S5-2
C144		P12-135	32			TB2-60
C145		-136				TB2-59
C146		-137				TB2-58
C147		-138				TB2-57
C148		-139				TB2-56
C149		P12-140	32			TB2-55
C150		J8-14	33			S2-2
C151		J8-15	33			S6-2
C152		P12-141	32			TB2-54
C153		-142				TB2-53
C154		-143				TB2-52
C155		-144				TB2-51
C156		-145				TB2-50
C157		P12-146	32			TB2-49
C158		J8-16	33			S7-2
C159		J8-17	33			S9-2
C160		P12-147	32			TB2-48
C161		-148				-46
C162		-149				-45
C163		-150				-44
C164		-151				-43
C165		-152				-42
C166		-153				-41
C167		-154				-40
C168		-155				-39
C169		-156				-38
C170		-157				-37
C171		P12-158	32			TB2-37
C172		J8-18	33			S11-2
C173		J8-19	33			S8-2
C174		P12-159	32			TB2-36
C175		P12-160	32			TB2-35
C176		P12-161	32	WHT	26	AR

LEAD ELECTRICAL								
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
C177		P12-162	32	WHT	26		AR	TB2-33
C178	SEE NOTE 6	P12-163	32					TB2-32
C179		P12-164	32					TB2-31
C180	SEE NOTE 5	J8-20	33					S13-2
C181		J8-21	33					S1-3
C182		P12-165	32					TB2-30
C183		-166						-29
C184	SEE NOTE 6	-167						-28
C185		-168						-27
C186		-169						-26
C187	SEE NOTE 5	P12-170	32					TB2-25
C188		J8-22	33					S14-2
C189		P12-190	32					TB2-16
C190	SEE NOTE 6	-174						-24
C191		-175						-23
C192		P12-176	32					TB2-22
C193	SEE NOTE 5	J8-24	33					S15-2
C194		J8-25	33					S18-1
C195	SEE NOTE 6	P12-196	32					TB2-12
C196		-192						-14
C197	SEE NOTE 6	-204						-7
C198		P12-182	32					TB2-20
C199	SEE NOTE 5	J8-26	33					S16-2
C200		J8-27	33					S17-2
C201		P12-185	32					TB2-19
C202	SEE NOTE 6	-210						-1
C203		-187						-17
C204		-196						-13
C205		-181	32	WHT				TB2-21
C206	SEE NOTE 5	-193	40	ORN				S6-5
C207		P12-194	38	RED				S6-4
C208		J8-30	33	WHT				S18-2
C209		P12-197	32	WHT				TB2-11
C210		-209						-2
C211	SEE NOTE 6	-191						-15
C212		-201						-10
C213		-202						-9
C214		-203						-8
C215		-186						-18
C216		-207						-6
C217		-208	32	WHT				TB2-5
C218	SEE NOTE 5	P12-179	33	WHT				S19-2
C219		S1-1	35	YEL				S2-3
C220		S2-1						S3-3
C221		S3-1						S4-3
C222		S4-1						S5-3
C223		S6-1						S6-3
C224		S6-1						S7-3
C225		S7-1						S8-3
C226		S8-1						S9-3
C227		S9-1						S10-3
C228		S10-1						S11-3
C229		S11-1						S12-3
C230		S12-1						S13-3
C231		S13-1						S14-3
C232		S14-1						S15-3
C233		S15-1	35	YEL				S16-3
C234	SEE NOTE 5	S17-4	38	RED				S19-4
C235		S17-5	40	ORN				S19-5
C236		S6-4	38	RED				S2-4
C237		S6-5	40	ORN				S2-5
C238		S6-4	38	RED				S7-4
C239		S2-5	40	ORN				S7-5
C240		S7-4	38	RED				S3-4
C241		S7-5	40	ORN				S3-5
C242		S3-4	38	RED				S8-4
C243		S3-5	40	ORN				S8-5
C244		S8-4	38	RED				S9-4
C245		S8-5	40	ORN				S9-5
C246		S9-4	38	RED				S2-4
C247		S9-5	40	ORN				S2-5
C248		S12-4	38	RED				S15-4
C249		S12-5	40	ORN				S15-5
C250		S16-4	38	RED				S16-4
C251		S16-5	40	ORN				S16-5
C252		S6-4	38	RED				S3-4
C253		S6-5	40	ORN				S3-5
C254		S13-4	38	RED				S10-4
C255		S13-5	40	ORN				S10-5
C256		S10-4	38	RED				S11-4
C257		S10-5	40	ORN				S11-5
C258		S11-4	38	RED				S14-4
C259		S11-5	40	ORN				S14-5
C260		S14-4	38	RED				S7-4
C261		S14-5	40	ORN				S7-5
C262		S17-1	35	YEL				S18-3
C263	SEE NOTE 6	P12-184	32	WHT				62
C264	SEE NOTE 6	P12-183	41					63
C265	SEE NOTE 6	P12-20	32					TB1-67
C266		P12-8						TB1-82
C267		P12-73						TB2-4
C268		P12-177						TB2-3
C269		P12-19	32	WHT	26		AP	TB1-85

REVISIONS						
REV	DATE	DESCRIPTION	DR	CHK	DATE	APPROVED
A		REVISED PER TORR 26856	GPS	CH	5/4/94	
B		REVISED PER TORR 27913	APT	4/8	5/4/94	
C		REVISED PER TORR 28178	APT	5/5	5/10/94	
D		REVISED PER TORR 29705	R	5/5	5/10/94	

D ELECTRICAL					
FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
32	WHT	20	AR	TB2-64	SEE NOTE 6
				TB2-63	
				TB2-62	
				TB2-61	
				TB2-60	
				TB2-59	
				TB2-58	
				TB2-57	
				TB2-56	
				TB2-55	
				TB2-54	
				TB2-53	
				TB2-52	
				TB2-51	
				TB2-50	
				TB2-49	
				TB2-48	
				TB2-47	
				TB2-46	
				TB2-45	
				TB2-44	
				TB2-43	
				TB2-42	
				TB2-41	
				TB2-40	
				TB2-39	
				TB2-38	
				TB2-37	
				TB2-36	
				TB2-35	
				TB2-34	
				TB2-33	
				TB2-32	
				TB2-31	
				TB2-30	
				TB2-29	
				TB2-28	
				TB2-27	
				TB2-26	
				TB2-25	
				TB2-24	
				TB2-23	
				TB2-22	
				TB2-21	
				TB2-20	
				TB2-19	
				TB2-18	
				TB2-17	
				TB2-16	
				TB2-15	
				TB2-14	
				TB2-13	
				TB2-12	
				TB2-11	
				TB2-10	
				TB2-9	
				TB2-8	
				TB2-7	
				TB2-6	
				TB2-5	
				TB2-4	
				TB2-3	
				TB2-2	
				TB2-1	
32	WHT	20	AR	TB2-66	

LEAD ELECTRICAL								
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
C89		P12-46	32	WHT	26	AR	TBI-45	
C90		↓ -47	↑	↑	↑	↑	TBI-44	
C91		↓ -48	↑	↑	↑	↑	TBI-43	
C92		↓ -37	↑	↑	↑	↑	TBI-54	
C93		↓ -38	↑	↑	↑	↑	TBI-53	
C94		↓ -39	↑	↑	↑	↑	TBI-52	
C95		↓ -40	↑	↑	↑	↑	TBI-51	
C96		↓ -41	↑	↑	↑	↑	TBI-50	
C97		↓ -42	↑	↑	↑	↑	TBI-49	
C98		↓ -31	↑	↑	↑	↑	TBI-60	
C99		↓ -32	↑	↑	↑	↑	TBI-59	
C100		↓ -33	↑	↑	↑	↑	TBI-58	
C101		↓ -34	↑	↑	↑	↑	TBI-57	
C102		↓ -35	↑	↑	↑	↑	TBI-56	
C103		↓ -36	↑	↑	↑	↑	TBI-57	
C104		↓ -25	↑	↑	↑	↑	TBI-65	
C105		↓ -27	↑	↑	↑	↑	TBI-64	
C106	SEE NOTE 6	↓ -28	↑	↑	↑	↑	TBI-63	SEE NOTE 6
C107		↓ -29	↑	↑	↑	↑	TBI-62	
C108		↓ -30	↑	↑	↑	↑	TBI-61	
C109		↓ -21	↑	↑	↑	↑	TBI-71	
C110		↓ -22	↑	↑	↑	↑	TBI-70	
C111		↓ -23	↑	↑	↑	↑	TBI-69	
C112		↓ -24	↑	↑	↑	↑	TBI-68	
C113		↓ -13	↑	↑	↑	↑	TBI-76	
C114		↓ -15	↑	↑	↑	↑	TBI-75	
C115		↓ -16	↑	↑	↑	↑	TBI-74	
C116		↓ -17	↑	↑	↑	↑	TBI-73	
C117		↓ -18	↑	↑	↑	↑	TBI-72	
C118		↓ -7	↑	↑	↑	↑	TBI-61	
C119		↓ -9	↑	↑	↑	↑	TBI-60	
C120		↓ -10	↑	↑	↑	↑	TBI-79	
C121		↓ -11	↑	↑	↑	↑	TBI-76	
C122		↓ -12	↑	↑	↑	↑	TBI-77	
C123		↓ -1	↑	↑	↑	↑	TBI-67	
C124		↓ -3	↑	↑	↑	↑	TBI-66	
C125		↓ -4	↑	↑	↑	↑	TBI-65	
C126		↓ -5	↑	↑	↑	↑	TBI-64	
C127		P12-6	32	WHT			TBI-63	
C128		S16-1	35	YEL			S17-3	
C129		S5-4	38	RED			S19-4	
C130		S5-5	40	ORN			S19-5	
C131		S19-4	38	RED			S1-4	
C132		S19-5	40	ORN			S1-5	
C133		S1-4	38	RED			S18-4	
C134		S1-5	40	ORN			S18-5	
C135		S18-4	38	RED			S4-4	
C136	SEE NOTE 5	S18-5	40	ORN			S4-5	SEE NOTE 5
C137		J8-3	33	WHT			S2-2	
C138		↓ -5	↑	↑	↑	↑	S1-2	
C139		↓ -8	↑	↑	↑	↑	S3-2	
C140		↓ -9	↑	↑	↑	↑	S19-3	
C141		↓ -10	↑	↑	↑	↑	S2-3	
C142		↓ -11	↑	↑	↑	↑	S10-2	
C143		J8-13	33				S5-2	
C144		P12-135	32				TB2-60	
C145		↓ -136	↑	↑	↑	↑	TB2-59	
C146		↓ -137	↑	↑	↑	↑	TB2-58	
C147	SEE NOTE 6	↓ -138	↑	↑	↑	↑	TB2-57	SEE NOTE 6
C148		↓ -139	↑	↑	↑	↑	TB2-56	
C149		P12-140	32				TB2-55	
C150	SEE NOTE 5	J8-14	33				S12-2	SEE NOTE 5
C151		J8-15	33				S6-2	
C152		P12-141	32				TB2-54	
C153		↓ -142	↑	↑	↑	↑	TB2-53	
C154	SEE NOTE 6	↓ -143	↑	↑	↑	↑	TB2-52	SEE NOTE 6
C155		↓ -144	↑	↑	↑	↑	TB2-51	
C156		↓ -145	↑	↑	↑	↑	TB2-50	
C157		P12-146	32				TB2-49	
C158		J8-16	33				S7-2	
C159	SEE NOTE 5	J8-17	33				S9-2	SEE NOTE 5
C160		P12-147	32				TB2-48	
C161		↓ -148	↑	↑	↑	↑	TB2-47	
C162		↓ -149	↑	↑	↑	↑	TB2-46	
C163		↓ -150	↑	↑	↑	↑	TB2-45	
C164		↓ -151	↑	↑	↑	↑	TB2-44	
C165	SEE NOTE 6	↓ -152	↑	↑	↑	↑	TB2-43	SEE NOTE 6
C166		↓ -153	↑	↑	↑	↑	TB2-42	
C167		↓ -154	↑	↑	↑	↑	TB2-41	
C168		↓ -155	↑	↑	↑	↑	TB2-40	
C169		↓ -156	↑	↑	↑	↑	TB2-39	
C170		↓ -157	↑	↑	↑	↑	TB2-38	
C171		P12-158	32				TB2-37	
C172	SEE NOTE 5	J8-18	33				S11-2	SEE NOTE 5
C173		J8-19	33				S8-2	
C174		P12-159	32				TB2-36	
C175	SEE NOTE 6	P12-160	32				TB2-35	SEE NOTE 6
C176		P12-161	32	WHT	26	AR	TB2-34	

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWS	LENGTH	TO	REMARKS	
C177		P12-162	32	WHT	26	AR	TB2-33		
C178	SEE NOTE 6	P12-163	32				TB2-32	SEE NOTE 6	
C179		P12-164	32				TB2-31		
C180	SEE NOTE 5	J8-20	33				S13-2	SEE NOTE 5	
C181		J8-21	33				S13-3		
C182		P12-165	32				TB2-30		
C183		1-166					25		
C184	SEE NOTE 6	1-167					28	SEE NOTE 6	
C185		1-168					27		
C186		1-169					26		
C187		P12-170	32				TB2-25		
C188	SEE NOTE 5	J8-22	33				S14-2	SEE NOTE 5	
C189		P12-190	32				TB2-16		
C190		1-174					24		
C191	SEE NOTE 6	1-175					23	SEE NOTE 6	
C192		P12-176	32				TB2-22		
C193	SEE NOTE 5	J8-23	33				S15-2	SEE NOTE 5	
C194		J8-25	33				S18-1		
C195		P12-196	32				TB2-12		
C196	SEE NOTE 6	1-192					14	SEE NOTE 6	
C197		1-204					7	SEE NOTE 6	
C198		P12-182	32				TB2-20		
C199	SEE NOTE 5	J8-26	33				S16-2	SEE NOTE 5	
C200		J8-27	33				S17-2		
C201		P12-183	32				TB2-19		
C202	SEE NOTE 6	1-210					1	SEE NOTE 6	
C203		1-187					17		
C204		1-195					13		
C205		1-181	32	WHT			TB2-21		
C206	SEE NOTE 8	1-193	40	ORN			S6-5	SEE NOTE 8	
C207		P12-194	38	RED			S6-4		
C208		J8-30	33	WHT			S18-2		
C209		P12-197	32	WHT			TB2-11		
C210		1-209					2		
C211		1-191					15		
C212		1-201					10		
C213	SEE NOTE 6	1-202					9	SEE NOTE 6	
C214		1-203					8		
C215		1-186					18		
C216		1-207					6		
C217		1-208	32	WHT			TB2-5		
C218		P12-179	33	WHT			S19-2		
C219		S11-1	35	YEL			S2-3		
C220		S2-1					S3-3		
C221		S3-1					S4-3		
C222		S4-1					S5-3		
C223		S6-1					S6-3		
C224		S6-1					S7-3		
C225		S7-1					S8-3		
C226		S8-1					S9-3		
C227		S9-1					S10-3		
C228		S10-1					S11-3		
C229		S11-1					S12-3		
C230		S12-1					S13-3		
C231		S13-1					S14-3		
C232		S14-1					S15-3		
C233		S15-1	35	YEL			S16-3		
C234	SEE NOTE 8	S17-4	40	ORN			S5-4	SEE NOTE 8	
C235		S17-5	40	ORN			S5-5		
C236		S6-4	38	RED			S2-4		
C237		S6-5	40	ORN			S2-5		
C238		S2-4	38	RED			S7-4		
C239		S2-5	40	ORN			S7-5		
C240		S7-4	38	RED			S3-4	SEE NOTE 5	
C241		S7-5	40	ORN			S3-5		
C242		S3-4	38	RED			S8-4		
C243		S3-5	40	ORN			S8-5		
C244		S8-4	38	RED			S9-4		
C245		S8-5	40	ORN			S9-5		
C246		S9-4	38	RED			S2-4		
C247		S9-5	40	ORN			S2-5		
C248		S2-4	38	RED			S15-4		
C249		S2-5	40	ORN			S15-5		
C250		S15-4	38	RED			S6-4		
C251		S15-5	40	ORN			S6-5		
C252		S6-4	38	RED			S3-4		
C253		S6-5	40	ORN			S3-5		
C254		S13-4	38	RED			S0-4		
C255		S13-5	40	ORN			S0-5		
C256		S10-4	38	RED			S11-4		
C257		S10-5	40	ORN			S11-5		
C258		S11-4	38	RED			S4-4		
C259		S11-5	40	ORN			S4-5		
C260		S14-4	38	RED			S7-4		
C261		S14-5	40	ORN			S7-5		
C262		S17-1	35	YEL			S18-3		
C263	SEE NOTE 6	P12-184	32	WHT			62	SEE NOTE 6	
C264	SEE NOTE 6	P12-183	41				63	SEE NOTE 5	
C265		P12-20	32				TB1-67		
C266	SEE NOTE 6	P12-8					TB1-82	SEE NOTE 6	
C267		P12-9					TB2-4		
C268		P12-173					TB2-3		
C269		P12-19	32	WHT	26	AR	TB1-8A		

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LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C1		P12-131	32	WHT	26	AR	TB2-64		
C2		-132					TB2-63		
C3		-133					TB2-62		
C4		-134					TB2-61		
C5		-127					TB2-60		
C6		-128					TB2-59		
C7		-129					TB2-58		
C8		-130					TB2-57		
C9		-123					TB2-56		
C10		-124					TB2-55		
C11		-125					TB2-54		
C12		-126					TB2-53		
C13		-119					TB2-52		
C14		-121					TB2-51		
C15		-122					TB2-50		
C16		-115					TB2-49		
C17		-116					TB2-48		
C18		-117					TB2-47		
C19		-118					TB2-46		
C20		-111					TB2-45		
C21		-112					TB2-44		
C22		-113					TB2-43		
C23		-114					TB2-42		
C24		-107					TB2-41		
C25		-108					TB2-40		
C26		-109					TB2-39		
C27		-110					TB2-38		
C28		-103					TB2-37		
C29		-104					TB2-36		
C30		-105					TB2-35		
C31		-106					TB2-34		
C32		-99					TB2-33		
C33		-100					TB2-32		
C34		-101					TB2-31		
C35		-102					TB2-30		
C36		-95					TB2-29		
C37		-96					TB2-28		
C38		-97					TB2-27		
C39		-98					TB2-26		
C40		-91					TB2-25		
C41		-92					TB2-24		
C42		-93					TB2-23		
C43		-94					TB2-22		
C44	SEE NOTE 6	-87					TB2-21		SEE NOTE 6
C45		-88					TB2-20		
C46		-89					TB2-19		
C47		-90					TB2-18		
C48		-84					TB2-17		
C49		-85					TB2-16		
C50		-86					TB2-15		
C51		-79					TB2-14		
C52		-80					TB2-13		
C53		-81					TB2-12		
C54		-82					TB2-11		
C55		-73					TB2-10		
C56		-74					TB2-9		
C57		-75					TB2-8		
C58		-76					TB2-7		
C59		-77					TB2-6		
C60		-78					TB2-5		
C61		-67					TB2-4		
C62		-68					TB2-3		
C63		-69					TB2-2		
C64		-70					TB2-1		
C65		-71					TB2-0		
C66		-72					TB1-31		
C67		-61					TB1-30		
C68		-62					TB1-29		
C69		-63					TB1-28		
C70		-64					TB1-27		
C71		-65					TB1-26		
C72		-66					TB1-25		
C73		-55					TB1-24		
C74		-56					TB1-23		
C75		-57					TB1-22		
C76		-58					TB1-21		
C77		-59					TB1-20		
C78		-60					TB1-19		
C79		-50					TB1-18		
C80		-51					TB1-17		
C81		-52					TB1-16		
C82		-53					TB1-15		
C83		-54					TB1-14		
C84		-43					TB1-13		
C85		-44					TB1-12		
C86		-45					TB1-11		
C87		P12-45	32	WHT	26	AR	TB1-10		
C88							TB1-9		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C89		P12-46	32	WHT	26	AR	TB1-8		
C90		-47					TB1-7		
C91		-48					TB1-6		
C92		-49					TB1-5		
C93		-38					TB1-4		
C94		-39					TB1-3		
C95		-40					TB1-2		
C96		-41					TB1-1		
C97		-42					TB1-0		
C98		-31					TB1-31		
C99		-32					TB1-30		
C100		-33					TB1-29		
C101		-34					TB1-28		
C102		-35					TB1-27		
C103		-36					TB1-26		
C104		-25					TB1-25		
C105		-27					TB1-24		
C106		-28					TB1-23		
C107		-29					TB1-22		
C108		-30					TB1-21		
C109		-21					TB1-20		
C110		-22					TB1-19		
C111		-23					TB1-18		
C112		-24					TB1-17		
C113		-13					TB1-16		
C114		-15					TB1-15		
C115		-16					TB1-14		
C116		-17					TB1-13		
C117		-18					TB1-12		
C118		-7					TB1-11		
C119		-10					TB1-10		
C120		-11					TB1-9		
C121		-12					TB1-8		
C122		-1					TB1-7		
C123		-3					TB1-6		
C124		-4					TB1-5		
C125		-5					TB1-4		
C126		-6					TB1-3		
C127		P12-6	32	WHT	26	AR	TB1-2		
C128		S17-1	35	YEL			TB1-1		
C129		S5-4	38	RED			TB1-0		
C130		S5-5	40	ORN			TB1-31		
C131		S19-4	38	RED			TB1-30		
C132		S19-5	40	ORN			TB1-29		
C133		S1-4	38	RED			TB1-28		
C134		S1-5	40	ORN			TB1-27		
C135		S18-4	38	RED			TB1-26		
C136		S18-5	40	ORN			TB1-25		
C137		J8-3	33	WHT			TB1-24		
C138		J-5	33	WHT			TB1-23		
C139		J-8	33	WHT			TB1-22		
C140		J-9	33	WHT			TB1-21		
C141		J-10	33	WHT			TB1-20		
C142		J8-11	33	WHT			TB1-19		
C143		J8-13	33	WHT			TB1-18		
C144		P12-135	32	WHT	26	AR	TB2-59		
C145		-136					TB2-58		
C146		-137					TB2-57		
C147		-138					TB2-56		
C148		-139					TB2-55		
C149		P12-140	32	WHT	26	AR	TB2-54		
C150		J8-14	33	WHT			TB2-53		
C151		J8-15	33	WHT			TB2-52		
C152		P12-141	32	WHT	26	AR	TB2-51		
C153		-142					TB2-50		
C154		-143					TB2-49		
C155		-144					TB2-48		
C156		-145					TB2-47		
C157		P12-146	32	WHT	26	AR	TB2-46		
C158		J8-16	33	WHT			TB2-45		
C159		J8-17	33	WHT			TB2-44		
C160		P12-147	32	WHT	26	AR	TB2-43		
C161		-148					TB2-42		
C162		-149					TB2-41		
C163		-150					TB2-40		
C164		-151					TB2-39		
C165		-152					TB2-38		
C166		-153					TB2-37		
C167		-154					TB2-36		
C168		-155					TB2-35		
C169		-156					TB2-34		
C170		-157					TB2-33		
C171		P12-158	32	WHT	26	AR	TB2-32		
C172		J8-18	33	WHT			TB2-31		
C173		J8-19	33	WHT			TB2-30		
C174		P12-159	32	WHT	26	AR	TB2-29		
C175		P12-160	32	WHT	26	AR	TB2-28		
C176		P12-161	32	WHT	26	AR	TB2-27		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C177		P12-162	32	WHT	26		AR	TB2-33	
C178	SEE NOTE 6	P12-163	32					TB2-32	SEE NOTE 6
C179		P12-164	32					TB2-31	
C180	SEE NOTE 5	J8-20	33					S13-2	
C181		J8-21	33					S1-3	SEE NOTE 5
C182		P12-165	32					TB2-30	
C183		-166						-29	
C184		-167						-28	
C185	SEE NOTE 6	-168						TB2-27	SEE NOTE 6
C186		-169						-26	
C187		P12-170	32					TB2-25	
C188	SEE NOTE 5	J8-22	33					S14-2	SEE NOTE 5
C189		P12-190	32					TB2-16	
C190		-174						-24	
C191	SEE NOTE 6	-175						-23	SEE NOTE 6
C192		P12-176	32					TB2-22	
C193	SEE NOTE 5	J8-24	33					S18-2	SEE NOTE 5
C194		J8-25	33					S18-1	
C195		P12-196	32					TB2-12	
C196	SEE NOTE 6	-192						-14	SEE NOTE 6
C197		-204						-7	
C198		P12-192	32					TB2-20	
C199	SEE NOTE 5	J8-26	33					S16-2	SEE NOTE 5
C200		J8-27	33					S17-2	
C201		P12-185	32					TB2-19	
C202	SEE NOTE 6	-210						-1	SEE NOTE 6
C203		-187						-17	
C204		-195						-13	
C205		-181	32	WHT				TB2-21	
C206		-193	40	ORN				S6-5	
C207	SEE NOTE 8	P12-184	38	RED				S6-4	SEE NOTE 5
C208		J8-30	33	WHT				S18-2	
C209		P12-197	32	WHT				TB2-11	
C210		-209						-2	
C211		-191						-15	
C212		-201						-10	
C213	SEE NOTE 6	-202						-9	SEE NOTE 6
C214		-203						-8	
C215		-186						-18	
C216		-207						-6	
C217		-208	32	WHT				TB2-5	
C218		P12-179	33	WHT				S19-2	
C219		S1-1	35	YEL				S2-3	
C220		S2-1						S3-3	
C221		S3-1						S4-3	
C222		S4-1						S5-3	
C223		S5-1						S6-3	
C224		S6-1						S7-3	
C225		S7-1						S8-3	
C226		S8-1						S9-3	
C227		S9-1						S10-3	
C228		S10-1						S11-3	
C229		S11-1						S12-3	
C230		S12-1						S13-3	
C231		S13-1						S14-3	
C232		S14-1						S15-3	
C233	SEE NOTE 5	S15-1	35	YEL				S16-3	
C234		S17-4	38	RED				S5-4	
C235		S17-5	40	ORN				S5-5	
C236		S6-4	38	RED				S2-4	
C237		S6-5	40	ORN				S2-5	
C238		S2-4	38	RED				S7-4	
C239		S2-5	40	ORN				S3-4	
C240		S7-4	38	RED				S3-5	SEE NOTE 5
C241		S7-5	40	ORN				S3-5	
C242		S3-4	38	RED				S8-4	
C243		S3-5	40	ORN				S8-5	
C244		S8-4	38	RED				S9-4	
C245		S8-5	40	ORN				S9-5	
C246		S9-4	38	RED				S2-4	
C247		S9-5	40	ORN				S2-5	
C248		S12-4	38	RED				S15-4	
C249		S12-5	40	ORN				S15-5	
C250		S15-4	38	RED				S16-4	
C251		S15-5	40	ORN				S16-5	
C252		S16-4	38	RED				S13-4	
C253		S16-5	40	ORN				S13-5	
C254		S13-4	38	RED				S10-4	
C255		S13-5	40	ORN				S10-5	
C256		S10-4	38	RED				S11-4	
C257		S10-5	40	ORN				S11-5	
C258		S11-4	38	RED				S14-4	
C259		S11-5	40	ORN				S14-5	
C260		S14-4	38	RED				S17-4	
C261		S14-5	40	ORN				S17-5	
C262		S17-1	35	WHT				S18-3	
C263	SEE NOTE 6	P12-184	32	WHT				62	SEE NOTE 6
C264	SEE NOTE 6	P12-183	41					63	SEE NOTE 5
C265		P12-20	32					TB1-67	
C266	SEE NOTE 6	P12-8						TB1-82	SEE NOTE 6
C267		P12-173						TB2-4	
C268		P12-177						TB2-3	
C269		P12-19	32	WHT	26	AR		TB1-86	

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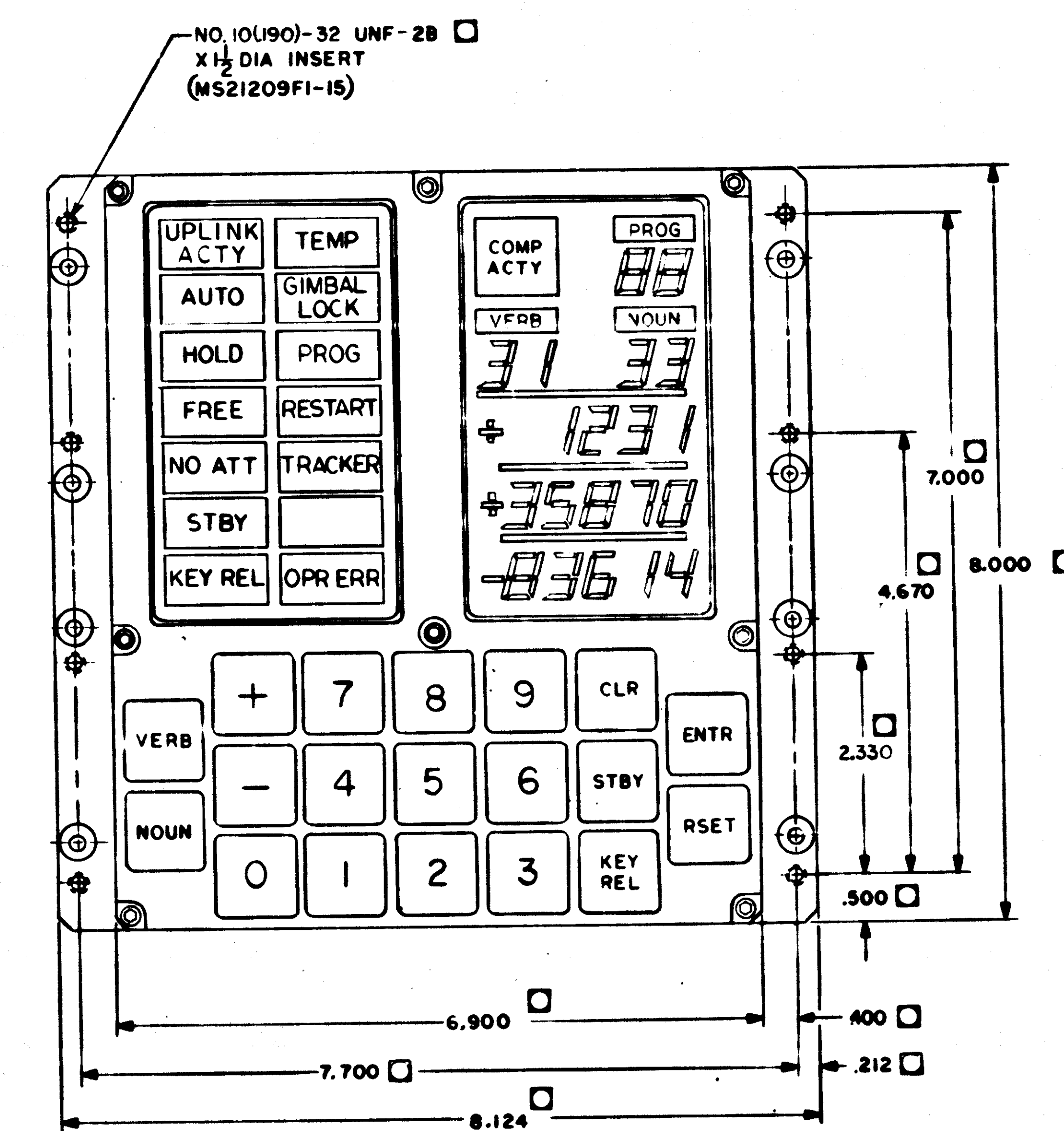
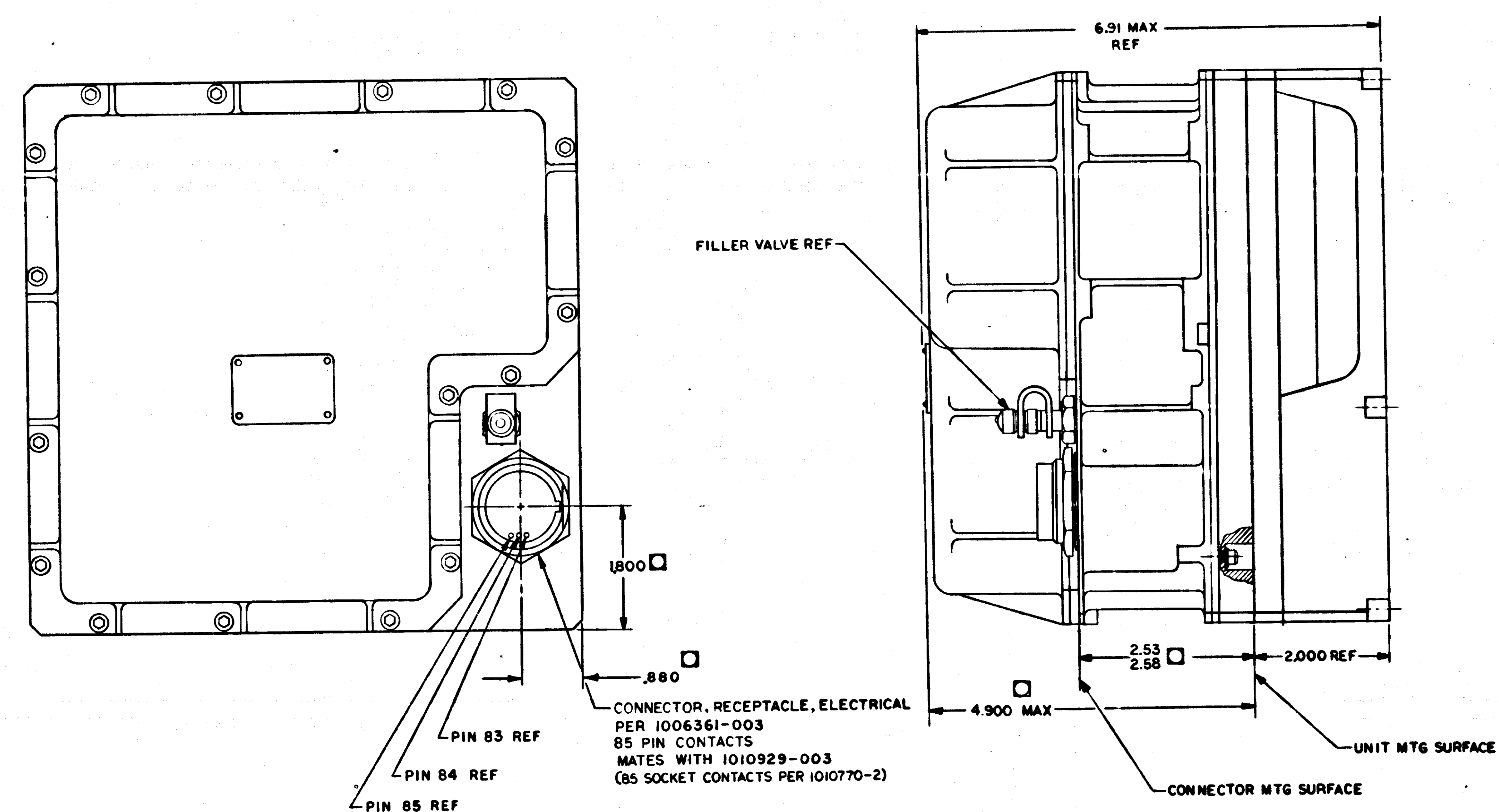
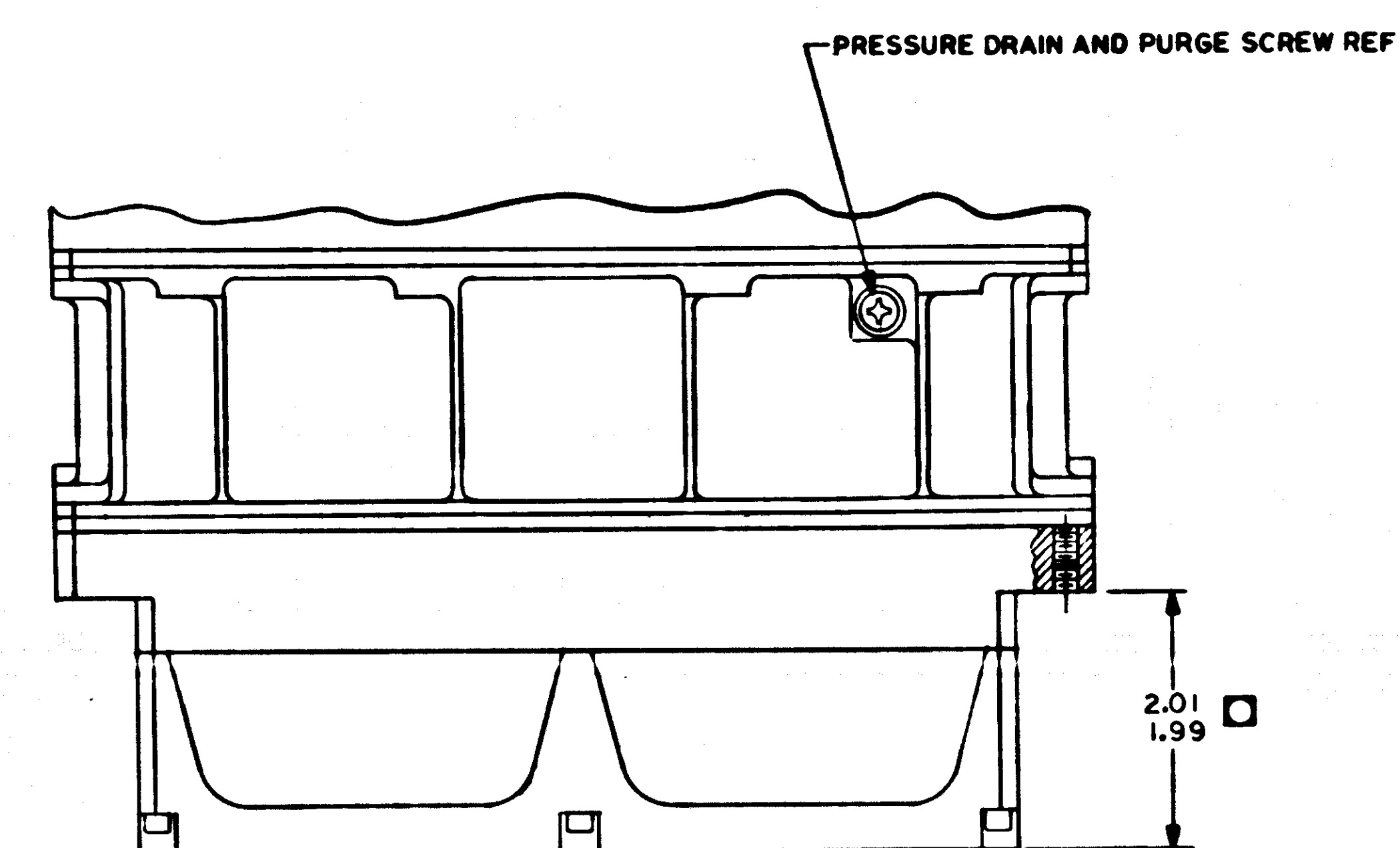
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LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C1		P12-131	32	WHT	26	AR	TB2-64		
C2		-132					TB2-63		
C3		-133					TB2-62		
C4		-134					TB2-61		
C5		-135					TB2-60		
C6		-136					TB2-59		
C7		-137					TB2-58		
C8		-138					TB2-57		
C9		-139					TB2-56		
C10		-140					TB2-55		
C11		-141					TB2-54		
C12		-142					TB2-53		
C13		-143					TB2-52		
C14		-144					TB2-51		
C15		-145					TB2-50		
C16		-146					TB2-49		
C17		-147					TB2-48		
C18		-148					TB2-47		
C19		-149					TB2-46		
C20		-150					TB2-45		
C21		-151					TB2-44		
C22		-152					TB2-43		
C23		-153					TB2-42		
C24		-154					TB2-41		
C25		-155					TB2-40		
C26		-156					TB2-39		
C27		-157					TB2-38		
C28		-158					TB2-37		
C29		-159					TB2-36		
C30		-160					TB2-35		
C31		-161					TB2-34		
C32		-162					TB2-33		
C33		-163					TB2-32		
C34		-164					TB2-31		
C35		-165					TB2-30		
C36		-166					TB2-29		
C37		-167					TB2-28		
C38		-168					TB2-27		
C39		-169					TB2-26		
C40		-170					TB2-25		
C41		-171					TB2-24		
C42		-172					TB2-23		
C43		-173					TB2-22		
C44		-174					TB2-21		
C45		-175					TB2-20		
C46		-176					TB2-19		
C47		-177					TB2-18		
C48		-178					TB2-17		
C49		-179					TB2-16		
C50		-180					TB2-15		
C51		-181					TB2-14		
C52		-182					TB2-13		
C53		-183					TB2-12		
C54		-184					TB2-11		
C55		-185					TB2-10		
C56		-186					TB2-9		
C57		-187					TB2-8		
C58		-188					TB2-7		
C59		-189					TB2-6		
C60		-190					TB2-5		
C61		-191					TB2-4		
C62		-192					TB2-3		
C63		-193					TB2-2		
C64		-194					TB2-1		
C65		-195					TB2-0		
C66		-196					TB2-0		
C67		-197					TB2-0		
C68		-198					TB2-0		
C69		-199					TB2-0		
C70		-200					TB2-0		
C71		-201					TB2-0		
C72		-202					TB2-0		
C73		-203					TB2-0		
C74		-204					TB2-0		
C75		-205					TB2-0		
C76		-206					TB2-0		
C77		-207					TB2-0		
C78		-208					TB2-0		
C79		-209					TB2-0		
C80		-210					TB2-0		
C81		-211					TB2-0		
C82		-212					TB2-0		
C83		-213					TB2-0		
C84		-214					TB2-0		
C85		-215					TB2-0		
C86		-216					TB2-0		
C87		-217					TB2-0		
C88		-218					TB2-0		
C89		-219					TB2-0		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C89		P12-46	32	WHT	26	AR	TB1-44		
C90		-47					TB1-44		
C91		-48					TB1-43		
C92		-49					TB1-42		
C93		-50					TB1-41		
C94		-51					TB1-40		
C95		-52					TB1-39		
C96		-53					TB1-38		
C97		-54					TB1-37		
C98		-55					TB1-36		
C99		-56					TB1-35		
C100		-57					TB1-34		
C101		-58					TB1-33		
C102		-59					TB1-32		
C103		-60					TB1-31		
C104		-61					TB1-30		
C105		-62					TB1-29		
C106		-63					TB1-28		
C107		-64					TB1-27		
C108		-65					TB1-26		
C109		-66					TB1-25		
C110		-67					TB1-24		
C111		-68					TB1-23		
C112		-69					TB1-22		
C113		-70					TB1-21		
C114		-71					TB1-20		
C115		-72					TB1-19		
C116		-73					TB1-18		
C117		-74					TB1-17		
C118		-75					TB1-16		
C119		-76					TB1-15		
C120		-77					TB1-14		
C121		-78					TB1-13		
C122		-79					TB1-12		
C123		-80					TB1-11		
C124		-81					TB1-10		
C125		-82					TB1-9		
C126		-83					TB1-8		
C127		-84					TB1-7		
C128		-85					TB1-6		
C129		-86					TB1-5		
C130		-87					TB1-4		
C131		-88					TB1-3		
C132		-89					TB1-2		
C133		-90					TB1-1		
C134		-91					TB1-0		
C135		-92					TB1-0		
C136		-93					TB1-0		
C137		-94					TB1-0		
C138		-95					TB1-0		
C139		-96					TB1-0		
C140		-97					TB1-0		
C141		-98					TB1-0		
C142		-99					TB1-0		
C143		-100					TB1-0		
C144		-101					TB1-0		
C145		-102					TB1-0		
C146		-103					TB1-0		
C147		-104					TB1-0		
C148		-105					TB1-0		
C149		-106					TB1-0		
C150		-107					TB1-0		
C151		-108					TB1-0		
C152		-109					TB1-0		
C153		-110					TB1-0		
C154		-111					TB1-0		
C155		-112					TB1-0		
C156		-113					TB1-0		
C157		-114					TB1-0		
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C168		-125					TB1-0		
C169		-126					TB1-0		
C170		-127					TB1-0		
C171		-128					TB1-0		
C172		-129					TB1-0		
C173		-130					TB1-0		
C174		-131					TB1-0		
C175		-132					TB1-0		
C176		-133					TB1-0		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C177		P12-162	32	WHT	26	AR	TB2-33		
C178	SEE NOTE 6	P12-163	32				TB2-32	SEE NOTE 6	
C179		P12-164	32				TB2-31		
C180	SEE NOTE 5	J8-20	33				TB2-30	SEE NOTE 5	
C181		J8-21	33				TB2-29		
C182		P12-165	32				TB2-28		
C183		-166					TB2-27		
C184	SEE NOTE 6	-167					TB2-26	SEE NOTE 6	
C185		-168					TB2-25		
C186		-169					TB2-24		
C187		P12-170	32				TB2-23		
C188	SEE NOTE 5	J8-22	33				TB2-22	SEE NOTE 5	
C189		P12-150	32				TB2-21		
C190		-174					TB2-20		
C191	SEE NOTE 6	-175					TB2-19	SEE NOTE 6	
C192		P12-176	32				TB2-18		
C193	SEE NOTE 5	J8-24	33				TB2-17	SEE NOTE 5	
C194		J8-25	33				TB2-16		
C195		P12-186	32				TB2-15		
C196	SEE NOTE 6	-182					TB2-14	SEE NOTE 6	
C197		-204					TB2-13		
C198		P12-182	32				TB2-12		
C199	SEE NOTE 5	J8-26	33				TB2-11	SEE NOTE 5	
C200		J8-27	33				TB2-10		
C201		P12-185	32				TB2-9		
C202	SEE NOTE 6	-210					TB2-8	SEE NOTE 6	
C203		-187					TB2-7		
C204		-188					TB2-6		
C205		-181					TB2-5		
C206	SEE NOTE 5	-193	40	ORN			TB2-4	SEE NOTE 5	
C207		M2-194	38	RFD			TB2-3		
C208		J8-30	33	WHT			TB2-2		
C209		P12-197	32	WHT			TB2-1		
C210		-209					TB2-0		
C211	SEE NOTE 6	-151					TB2-0	SEE NOTE 6	
C212		-201					TB2-0		
C213		-202					TB2-0		
C214		-203					TB2-0		
C215		-186					TB2-0		
C216		-207					TB2-0		
C217		-208	32	WHT			TB2-0		
C218		P12-179	33	WHT			TB2-0		
C219		S1-1	35	YEL			TB2-0		
C220		S2-1					TB2-0		
C221		S3-1					TB2-0		
C222		S4-1					TB2-0		
C223		S6-1					TB2-0		
C224		S7-1					TB2-0		
C225		S8-1					TB2-0		
C226		S9-1					TB2-0		
C227		S10-1					TB2-0		
C228		S11-1					TB2-0		
C229		S12-1					TB2-0		
C230		S13-1					TB2-0		
C231	SEE NOTE 5	S14-1	38	RED			TB2-0	SEE NOTE 5	
C232		S15-1	40	ORN			TB2-0		
C233		S16-1	40	ORN			TB2-0		
C234		S17-1	40	ORN			TB2-0		
C235		S18-1	40	ORN			TB2-0		
C236		S19-1	40	ORN			TB2-0		
C237		S20-1	40	ORN			TB2-0		
C238		S21-1	40	ORN			TB2-0		
C239		S22-1	40	ORN			TB2-0		
C240		S23-1	40	ORN			TB2-0		
C241		S24-1	40	ORN			TB2-0		
C242		S25-1	40	ORN			TB2-0		
C243		S26-1	40	ORN			TB2-0		
C244		S27-1	40	ORN			TB2-0		
C245		S28-1	40	ORN			TB2-0		
C246		S29-1	40	ORN			TB2-0		
C247		S30-1	40	ORN			TB2-0		
C248		S31-1	40	ORN			TB2-0		
C249		S32-1	40	ORN			TB2-0		
C250		S33-1	40	ORN			TB2-0		
C251		S34-1	40	ORN			TB2-0		
C252		S35-1	40	ORN			TB2-0		
C253		S36-1	40	ORN			TB2-0		
C254		S37-1	40	ORN			TB2-0		
C255		S38-1	40	ORN			TB2-0		
C256		S39-1	40	ORN			TB2-0		
C257		S40-1	40	ORN			TB2-0		
C258		S41-1	40	ORN			TB2-0		
C259		S42-1	40	ORN			TB2-0		
C260		S43-1	40	ORN			TB2-0		
C261		S44-1	40	ORN			TB2-0		
C262		S45-1	40	ORN			TB2-0		
C263	SEE NOTE 6	P12-184	32	WHT			TB2-0	SEE NOTE 6	
C264	SEE NOTE 6	P12-183	32	WHT			TB2-0	SEE NOTE 6	
C265		P12-20	32				TB2-0		
C266	SEE NOTE 6	P12-8					TB2-0	SEE NOTE 6	
C267		P12-173					TB2-0		
C268		P12-177					TB2-0		
C269		P12-19	32	WHT	26	AR	TB1-66		

2003956

REVISIONS 22943
SYM DESCRIPTION DATE APPROVAL

NOTES

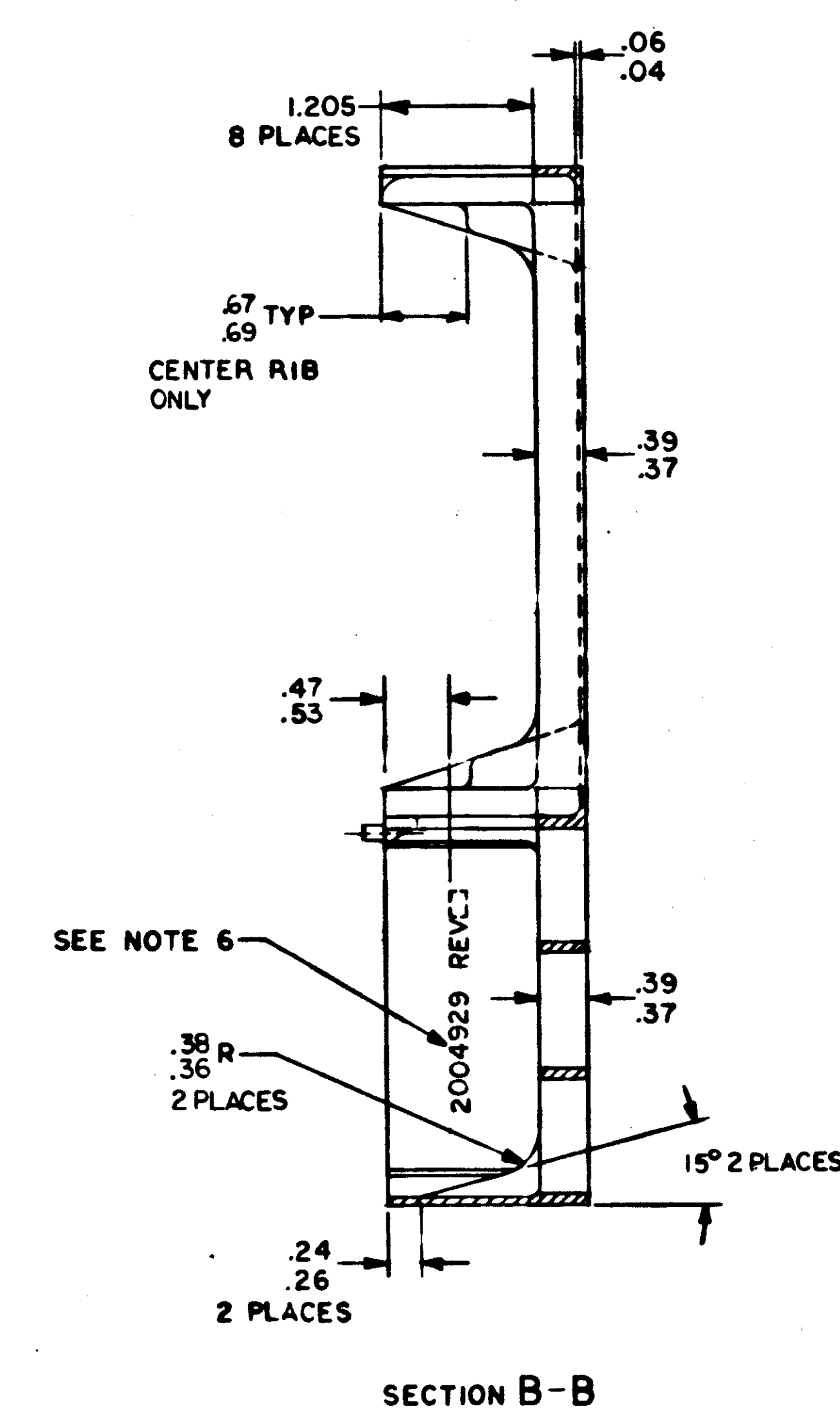
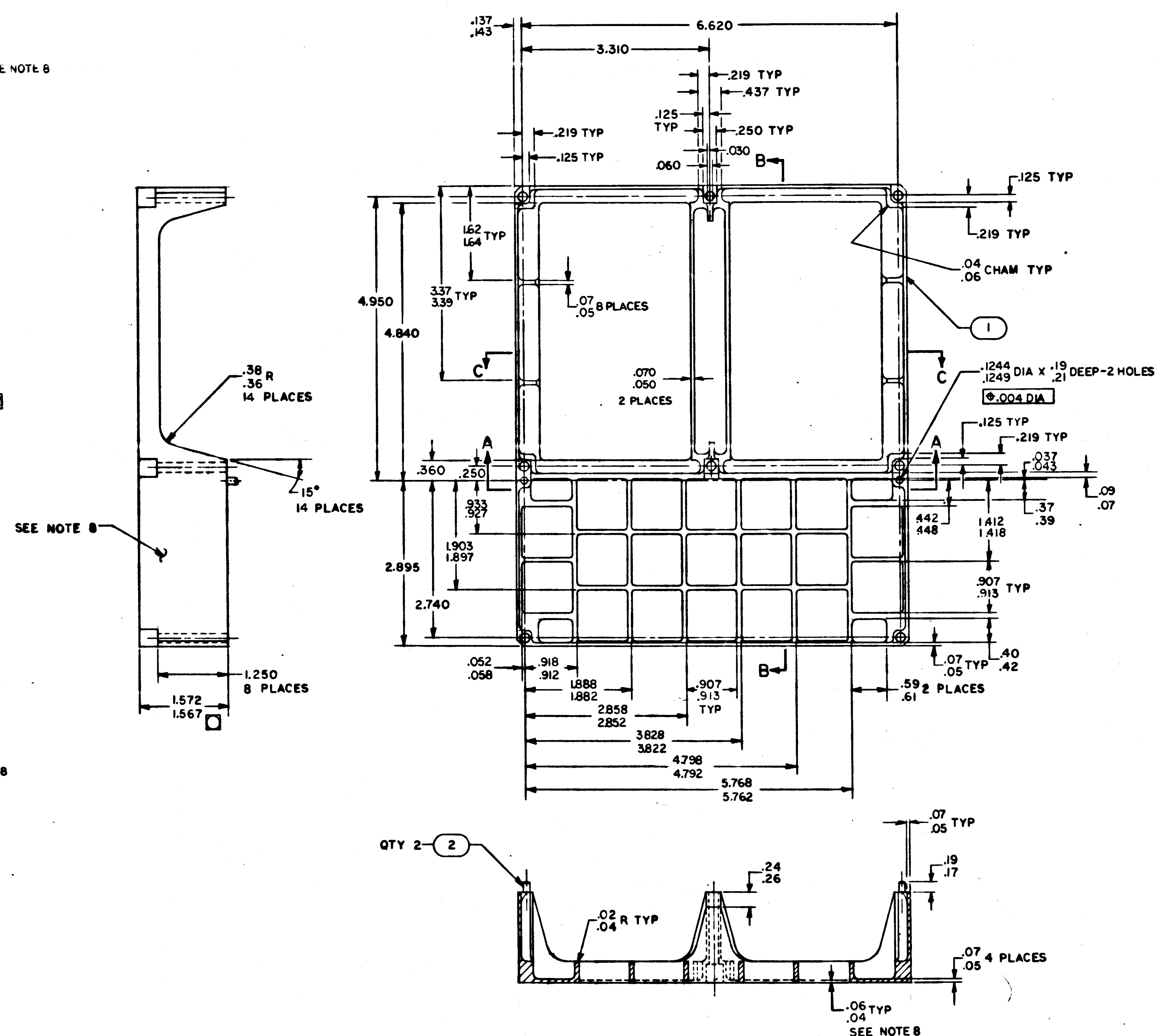
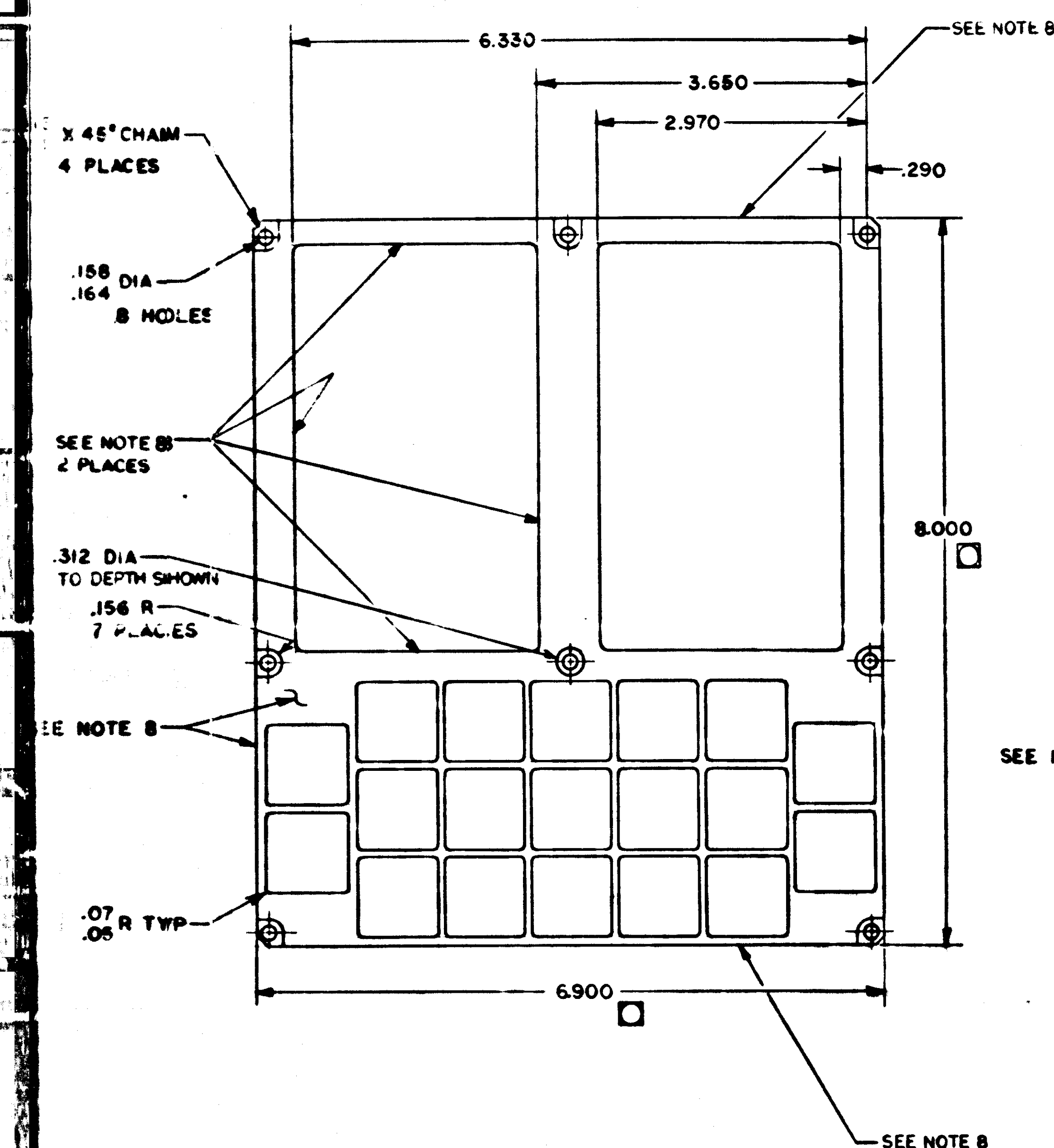
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2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
3. WEIGHT *Later*
4. INDICATES CENTER OF GRAVITY *Later*

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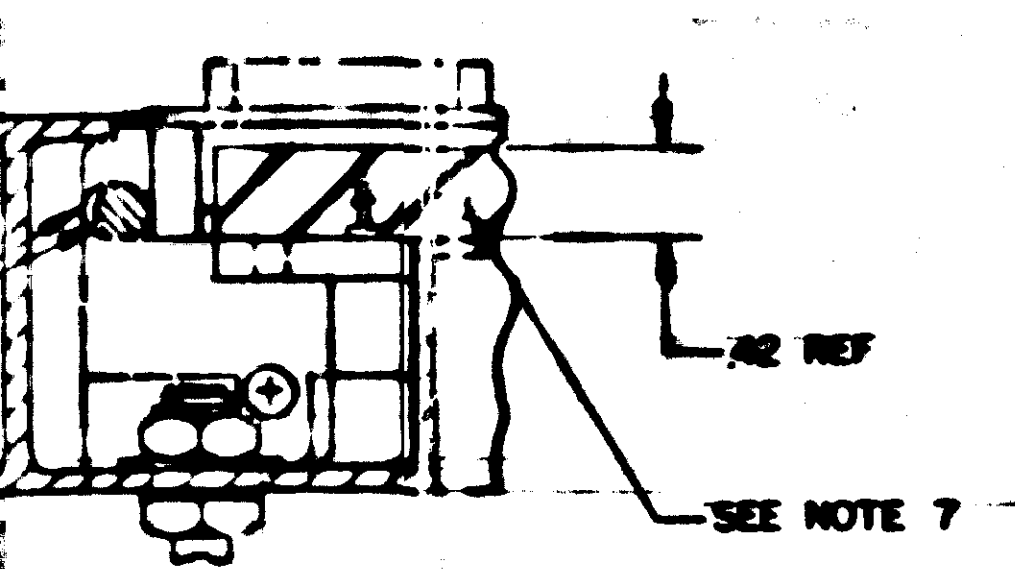
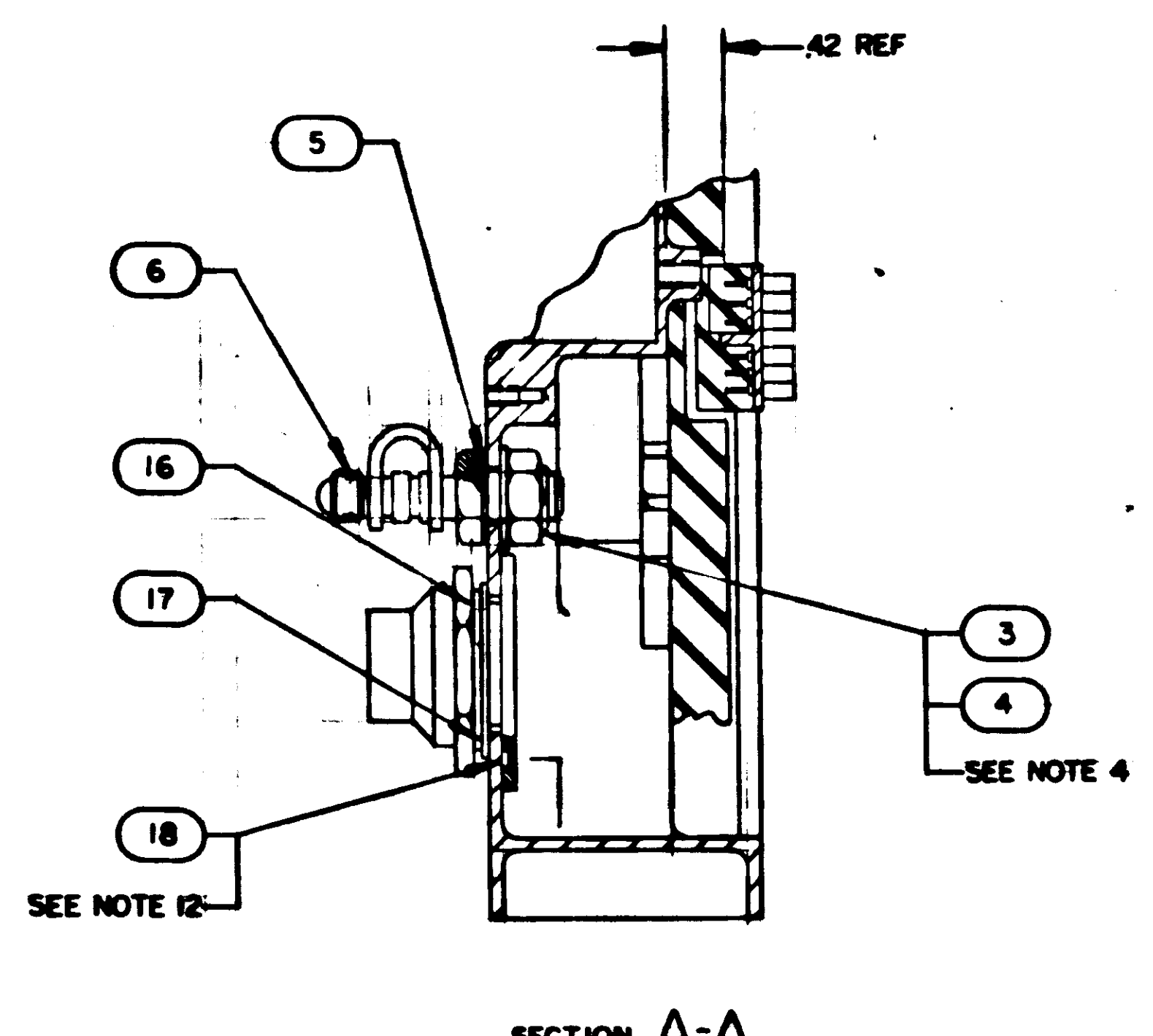
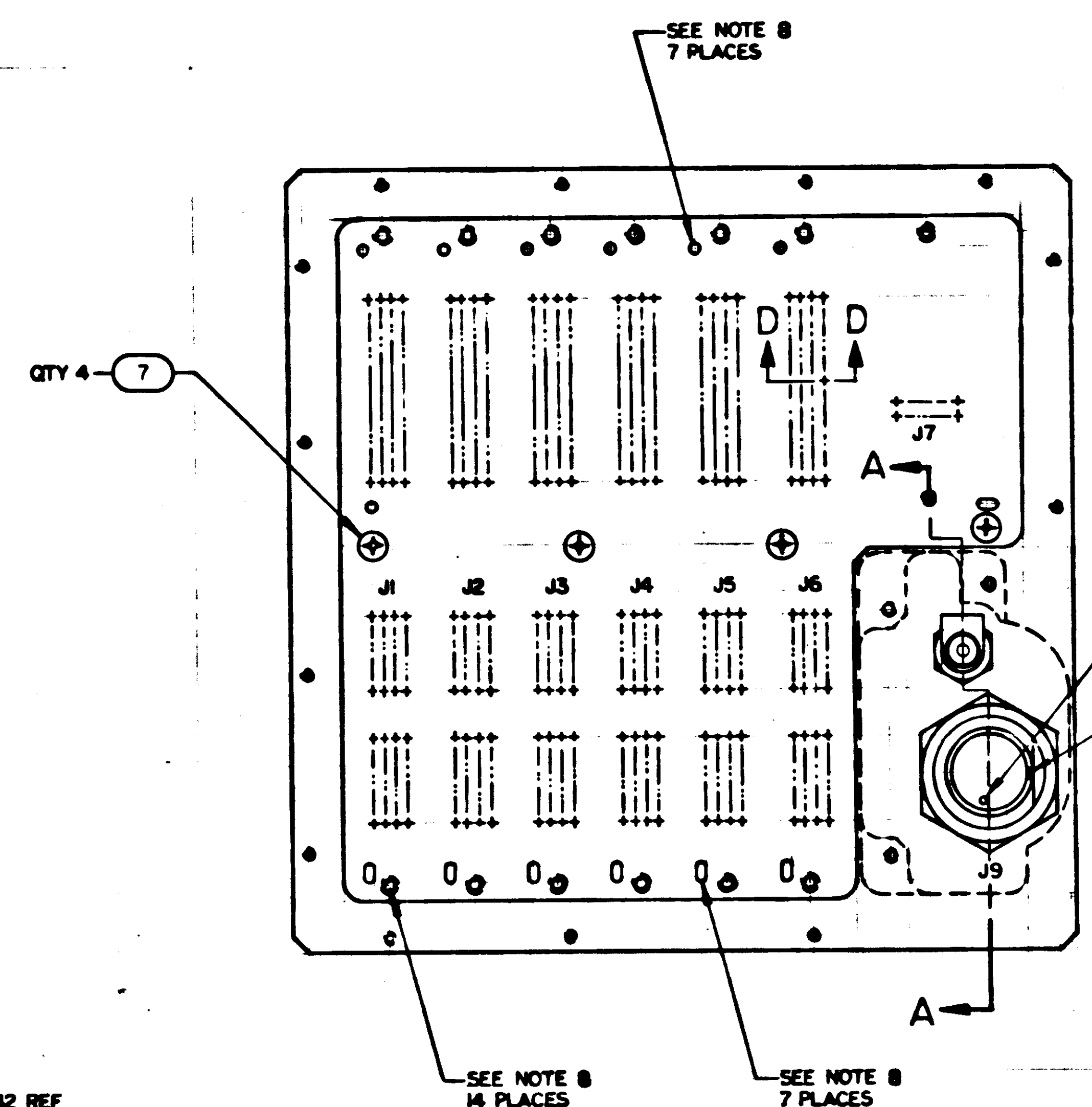
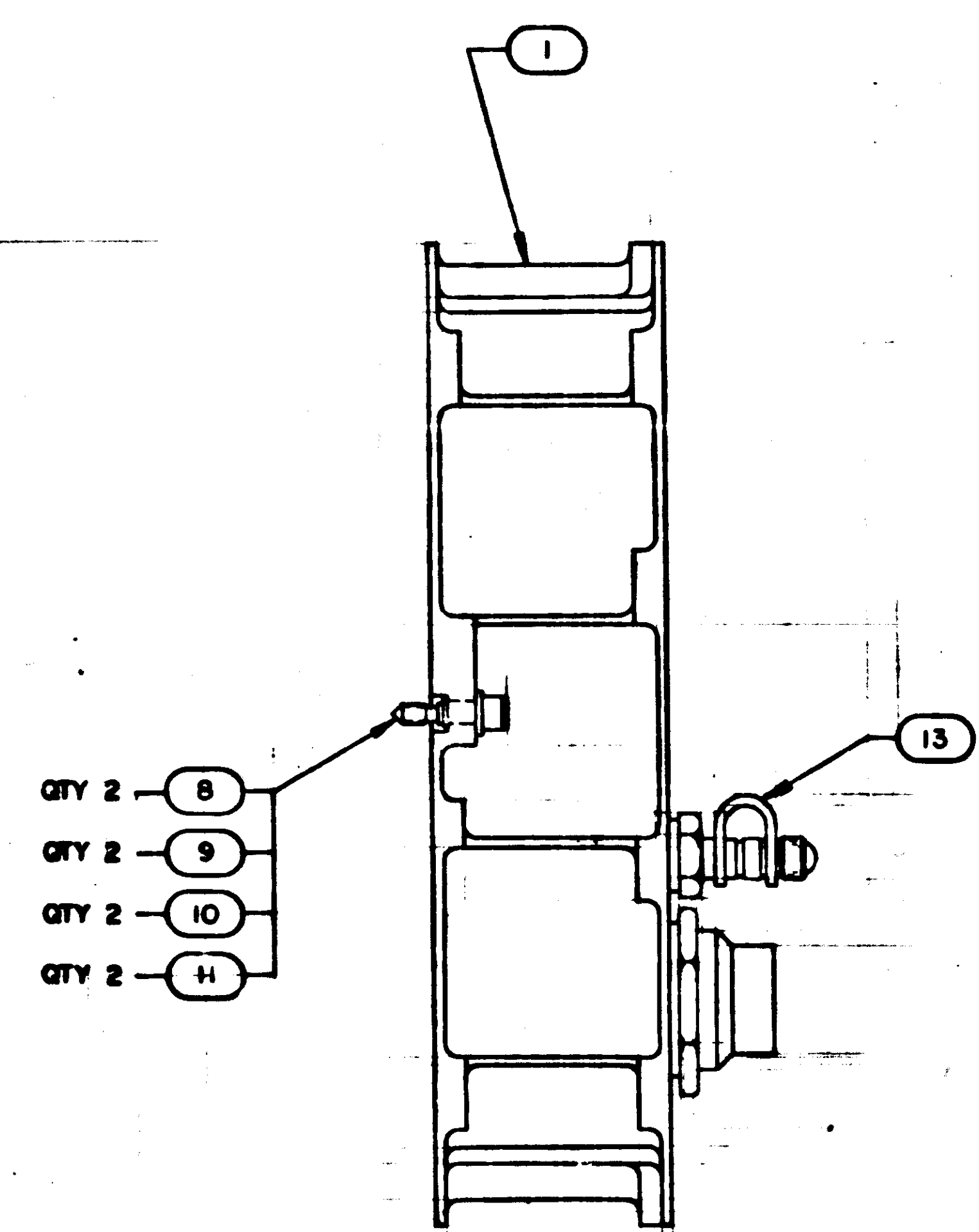
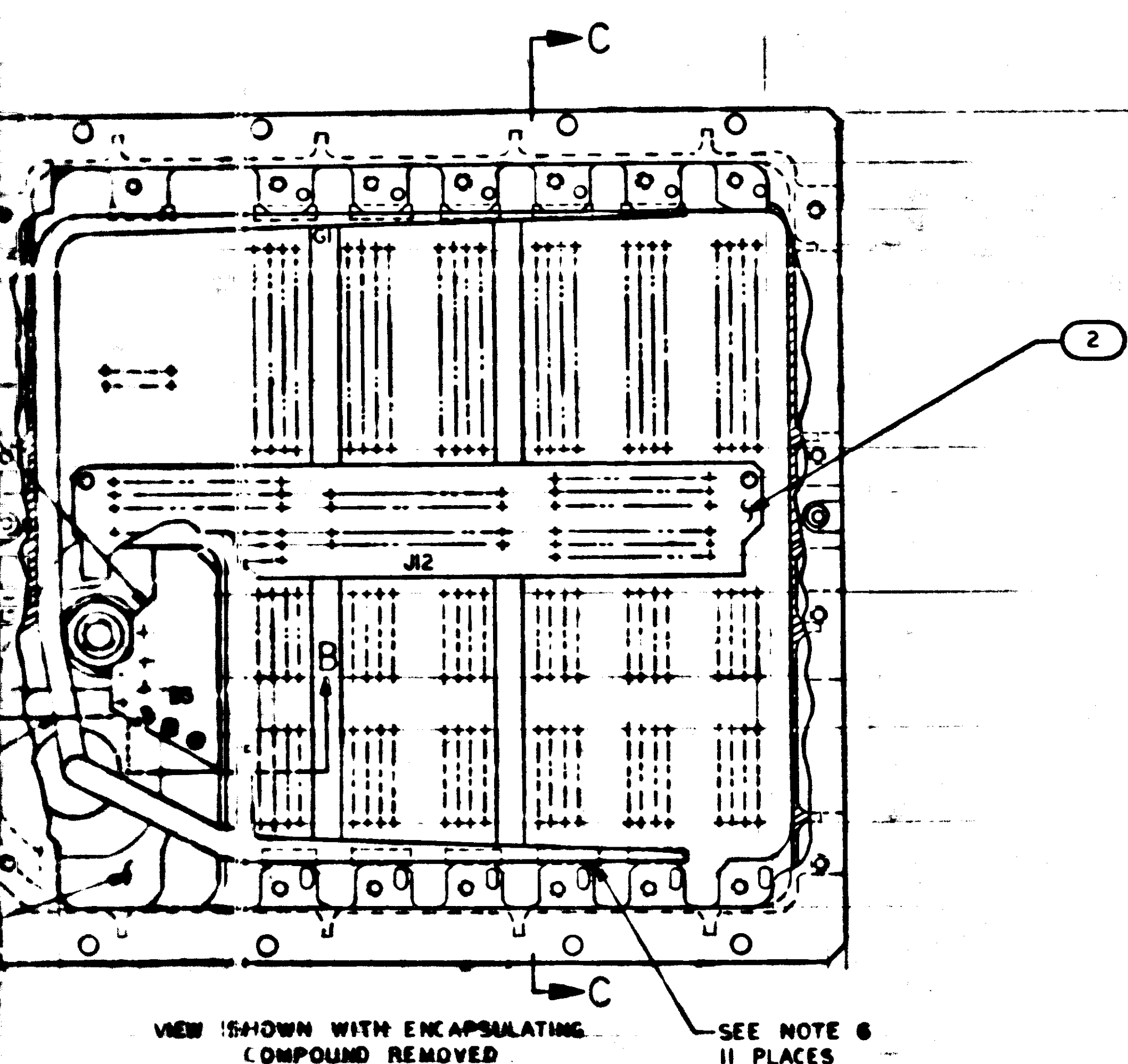
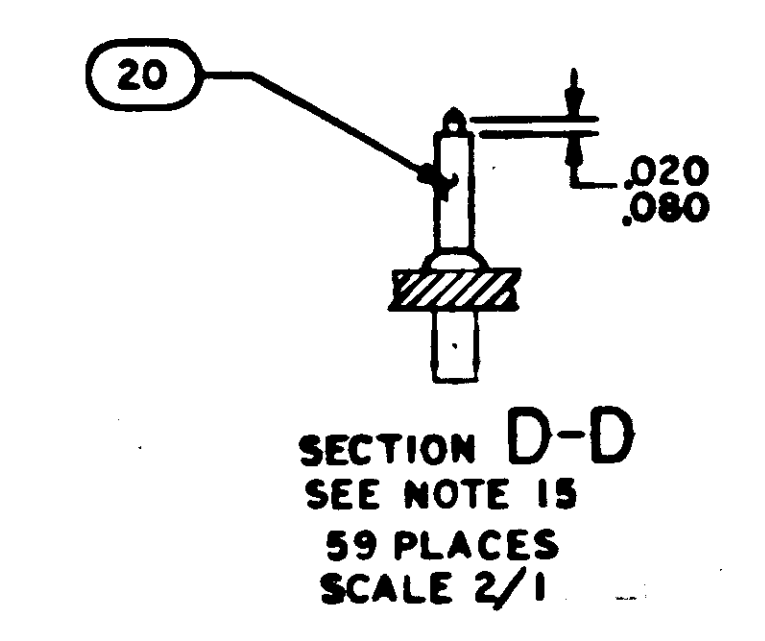
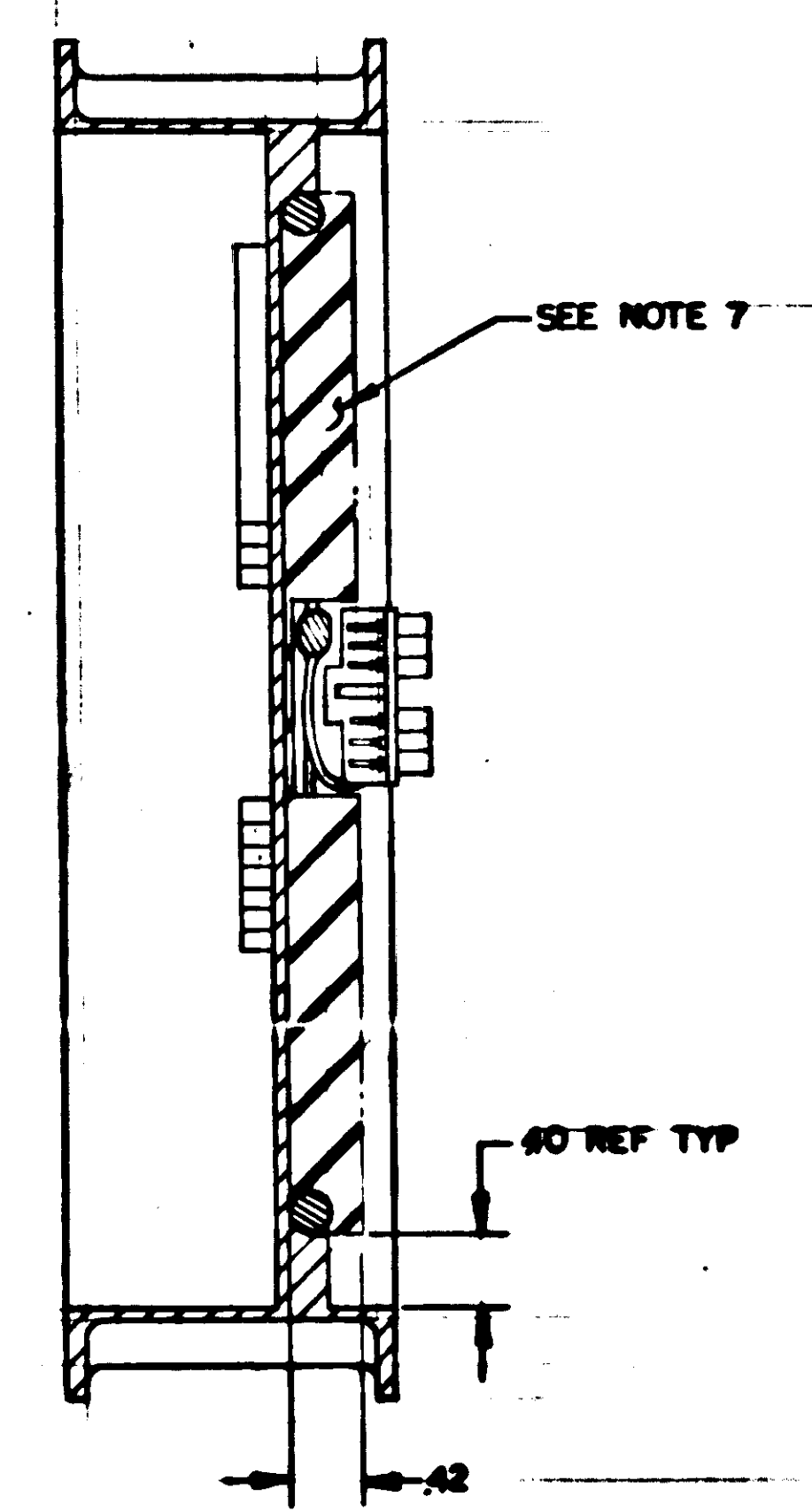
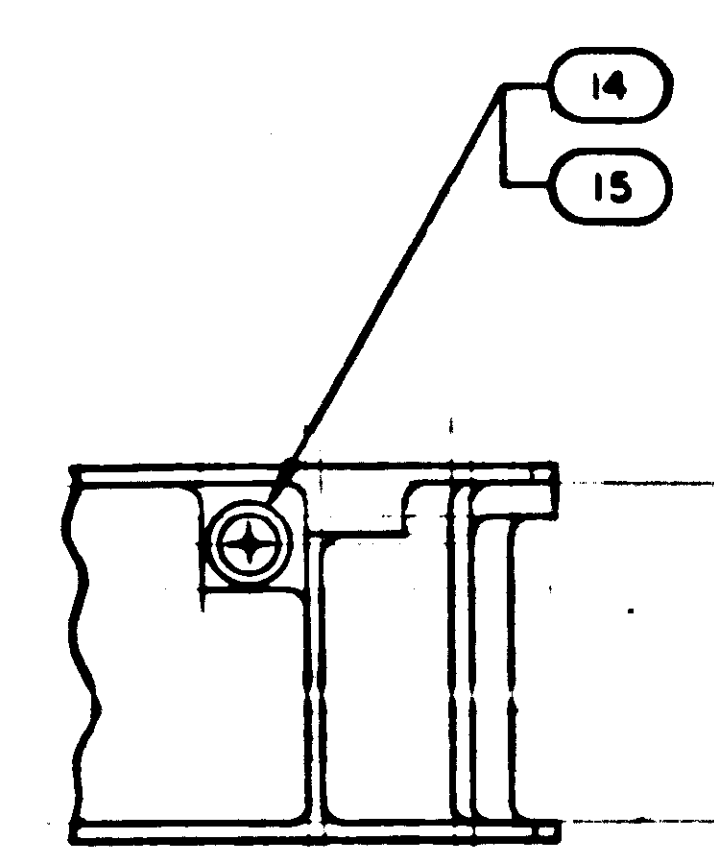
5003222

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	FIND NO
LIST OF MATERIALS			
MIT INSTRUMENTATION LAB MANNED SPACECRAFT CENTER HOUSTON, TEXAS			
AGC DSKY OUTLINE DRAWING			
DRAWN <i>R.P. [Signature]</i> CHECKED <i>[Signature]</i> APPROVAL <i>[Signature]</i>		CODE IDENT NO 80230	SIZE 2003956
MIT APPROVAL <i>[Signature]</i>		SCALE 1/1	SHEET 1 OF 1



1. MAT: 6061-T6-AL PER QQ-A-250/10,ITEMP 6
2. REMOVE BURRS AND SHARP EDGES,005/OIS
3. ALL SURFACES 125/
4. CHPMATE PER MIL-C-5541,TYPE II,GRADE C,CLASS B
5. UNLESS OTHERWISE SPECIFIED ALL FILLETS
AND CHAMFERS TO BE 1/8"
6. MARK 1/4" HIGH BLACK CHARACTERS PER
ND1002019 AND ND1002122,TYPE II,CLASS 2
USING INK 100627-0
7. DIMENSIONS CONTROLLED BY ICD MH01
8. DIMENSIONS INDICATED SURFACES WITH ICD 7028-1
9. MAY BE EXAMINED BY X-RAY PER ND1002019
10. INTERPRET DRAWING IN ACCORDANCE WITH
STANDARDS PRESCRIBED BY MIL-D-70327

2	MS16555-625	PIN, DOWEL
1	2004929-001	COVER, FRONT
QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
011		
LIST OF MATERIALS		
B1Y INSTRUMENTATION LAB Component Name MSB NO. CONTRACT		MANNED SPACECRAFT CENTER HOUSTON, TEXAS
DRAWN BY <i>WJH</i> DATE <i>11/16/68</i> CHECKED <i>WJH</i> APPROVAL <i>WJH</i> 11/16/68 APPROVAL <i>WJH</i> 11/16/68		COVER, FRONT A6C DSKY
NASA APPROVAL <i>WJH</i> MIT APPROVAL <i>WJH</i> 11/16/68		U.S. IDENT NO. SIZE 80230 J NMC INCHES WEIGHT 1.00 1.00
		NASA DRAWING NO. 2004929



CONFORMANCE WITH STANDARDS
ND1002019
12 PER ND1002071 (MIN) SOLDER PER ND1002079
NO. 3 TO BE 10 TO 1 FT-LBS
C.1 PER ND1002064, TYPE X
PER ND1002275
TO BE FREE FROM ENCAPSULATING COMPOUND
FOR DETECTION OF FIND NO. 12 TO BE 20 TO 25 FT LBS
PER ND1002031 EXCEPT ND1002072 TO HAVE
RELATED WIRE 1/2 TH 1-1/2 TURNS OF INSULATED
WIRE AND STRIP FORCE OF 5 LBS MIN.
WIRE AND STRIP FORCE OF 5 LBS MIN.
PER ND1002004 TYPE X
WIRE FIND NO. 3, EXCEPT FIND NO. 31 THRU 124

QTY	REQ	PART OR IDENTIFYING NO.	DESCRIPTION	REF
		2005954	INTERCONNECTING DIAGRAM	REF
		1006776-21	INSULATION SLEEVING	20
		2003880-011	TERMINAL BLOCK ASSY	19
		1000159-10	PACKING, PREFORMED O-RING	18
		1004546-6	WASHER, FLAT	17
		1010635-004	WASHER, LOCK	16
		MS159808N	WASHER, SEALING	15
		MS15957-42	SCREW, PAN HD, CROSS RECESSED	14
		2004931	RETAINER, VALVE CAP	13
		2003886-011	WIRING HARNESS, BRANCHED	12
		MS16633-4015	RING, RETAINING	11
		1004546-3	WASHER, FLAT	10
		1004546-1	WASHER, FLAT	9
		1004579-2	SCREW, JACKING	8
		MS15959-28	SCREW, FLAT HD, CROSS RECESSED	7
		2004903	VALVE, PNEUMATIC TANK	6
		1000159-14	PACKING, PREFORMED, O-RING	5
		MS15795-814	WASHER, FLAT	4
		MS203640624A	NUT, HEX	3
		2003882-011	CONNECTOR PLATE WIRED ASSY	2
		203947-011	IDM WIREWRAP PLATE ASSY	1

2003994		2003885	
HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

2003994		2003885	
HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

2003994		2003885	
HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

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HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

2003994		2003885	
HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

2003994		2003885	
HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

2003994		2003885	
HEAT TREATMENT	USED ON	FINAL FINISH	APPLICATION

2003994		2003885	
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2003885 A

REV	DATE	BY	APP
A	INITIAL RELEASE 790423	6/20/79	6/20/79

J7

J6

J5

J4

J3

J2

J1

TB3

SEE NOTE 11
4 PLACES

22

.95

QTY REQD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	PRD NO
LIST OF MATERIALS			
MIT INSTRUMENTATION LAB CAMBRIDGE MASS		MANNED SPACECRAFT CENTER HOUSTON TEXAS	
DRAWN: <i>[Signature]</i> DATE: 7/20/66		MAIN HOUSING ASSEMBLY AGC DSKY	
CHECKED: <i>[Signature]</i> DATE: 7/20/66		CODE IDENT NO: 80230 J	
APPROVAL: <i>[Signature]</i>		NASA DRAWING NO: 2003885	
2003994		SCALE: NONE	
HEAT TREATMENT		SHEET 2 OF 3	
HEAT ASSY		WT	
FINISH		SHEET 2 OF 3	

2/2003885

2003885 A

REVISIONS			
REV	DESCRIPTION	DATE	APPROVAL
A	INITIAL RELEASE 7006 J2-73	1/27/73	1/27/73

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	SEE NOTE	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
A1		J12-166	16	OPT	30	AR	J7-6		
A2		-167	16	OPT	30		J6-43		
A3		-160	17	WHT	26		-18		
A4		-159	16	OPT	30		-34		
A5		-154					-40		
A6		-153					-50		
A7		-148	16	OPT	30		-39		
A8		-147	17	WHT	26		-34		
A9		-142	16	OPT	30		-54		
A10		-141					-41		
A11		-136					-29		
A12		-135					-55		
A13		-187					-42		
A14		-210	16	OPT	30		-69		
A15		-182	17	WHT	26		-40		
A16		-204	16	OPT	30		-56		
A17		-192					-17		
A18		-176					-36		
A19		-175					-22		
A20		-174					J6-30		
A21		-170					J7-4		
A22		-159					J6-24		
A23		-168					J6-53		
A24		-164					J5-43		
A25		-163					-34		
A26		-162					-36		
A27		-161					-22		
A28		-158					-56		
A29		-157					-39		
A30		-156	16	OPT	30		-24		
A31		-155	17	WHT	26		-8		
A32		-152					-42		
A33		-151	16	OPT	30		-40		
A34		-150	17	WHT	26		-38		
A35		-149	16	OPT	30		-30		
A36	SEE NOTE 10	-146					-50		SEE NOTE 10
A37		-145					-55		
A38		-144					-49		
A39		-143					-29		
A40		-140					-54		
A41		-139					-53		
A42		-138					-41		
A43		-137					-17		
A44		-134	17	WHT	26		J5-60		
A45		-133	16	OPT	30		J4-43		
A46		-132					J4-6		
A47		-131					J6-84		
A48		-130					J4-24		
A49		-129					J4-39		
A50		-128					J4-17		
A51		-127					J6-83		
A52		-126					J4-50		
A53		-125					J4-40		
A54		-124					J4-36		
A55		-123					J6-78		
A56		-122					J4-18		
A57		-121					J4-29		
A58		-120					J4-18		
A59		-119					J6-70		
A60		-118					J4-34		
A61		-117					J4-38		
A62		-116					J4-21		
A63		-115					J6-76		
A64		-114					J4-55		
A65		-113					-41		
A66		-112					-42		
A67		-111					-83		
A68		-110					-53		
A69		-109					-49		
A70		-108					-70		
A71		-107					-70		
A72		J12-106	16	OPT	30	AR	J4-60		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	SEE NOTE	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
A73		J12-105	16	OPT	30	AR	J4-56		
A74		-104					J4-22		
A75		-103					J3-76		
A76		-102					-17		
A77		-101	16	OPT	30		-24		
A78		-100	17	WHT	26		-18		
A79		-99	16	OPT	30		-70		
A80		-98	16	OPT	30		-40		
A81		-97	16	OPT	30		-36		
A82		-96	17	WHT	26		J3-6		
A83		-95	16	OPT	30		J2-84		
A84		-94	16	OPT	30		J3-22		
A85		-93	16	OPT	30		J3-30		
A86		-92	17	WHT	26		J3-8		
A87		-91	16	OPT	30		J2-83		
A88		-90	16	OPT	30		J3-39		
A89		-89	16	OPT	30		J3-43		
A90		-88	17	WHT	26		J3-38		
A91		-87	16	OPT	30		J1-78		
A92		-86					J3-56		
A93		-85					J3-42		
A94		-84					J3-34		
A95		-83					J1-74		
A96		-82					J3-50		
A97		-81	16	OPT	30		J3-55		
A98		-80	17	WHT	26		J3-60		
A99		-79	16	OPT	30		J1-70		
A100		-78					J3-41		
A101		-77					J3-29		
A102		-76					J3-14		
A103		-75					J3-49		
A104		-74					J6-79		
A105		-73					J3-76		
A106		-72					J3-53		
A107		-71	16	OPT	30		J2-10		
A108	SEE NOTE 10	-70	17	WHT	26		J2-8		SEE NOTE 10
A109		-69	16	OPT	30		J2-18		
A110		-68					J5-70		
A111		-67					J5-84		
A112		-66					J2-56		
A113		-65					J2-24		
A114		-64	16	OPT	30		J2-36		
A115		-63	17	WHT	26		J2-6		
A116		-62	16	OPT	30		J5-83		
A117		-61					J5-78		
A118		-60					J2-21		
A119		-59					J2-30		
A120		-58					J2-40		
A121		-57					J2-34		
A122		-56					J5-92		
A123		-55					J4-79		
A124		-54					J2-50		
A125		-53					J2-39		
A126		-52					J2-43		
A127		-51					J2-22		
A128		-50					J4-78		
A129		-48					J2-55		
A130		-47					J2-42		
A131		-46					J2-38		
A132		-45					J2-29		
A133		-44					J3-84		
A134		-43					J3-83		
A135		-42					J2-54		
A136		-41					J2-49		
A137		-40					J2-41		
A138		-39					J2-17		
A139		-38					J3-78		
A140		-37					J3-92		
A141		-36					J2-53		
A142		-35					J1-24		
A143		-34	16	OPT	30		J1-17		
A144		J12-33	17	WHT	26	AR	J1-6		

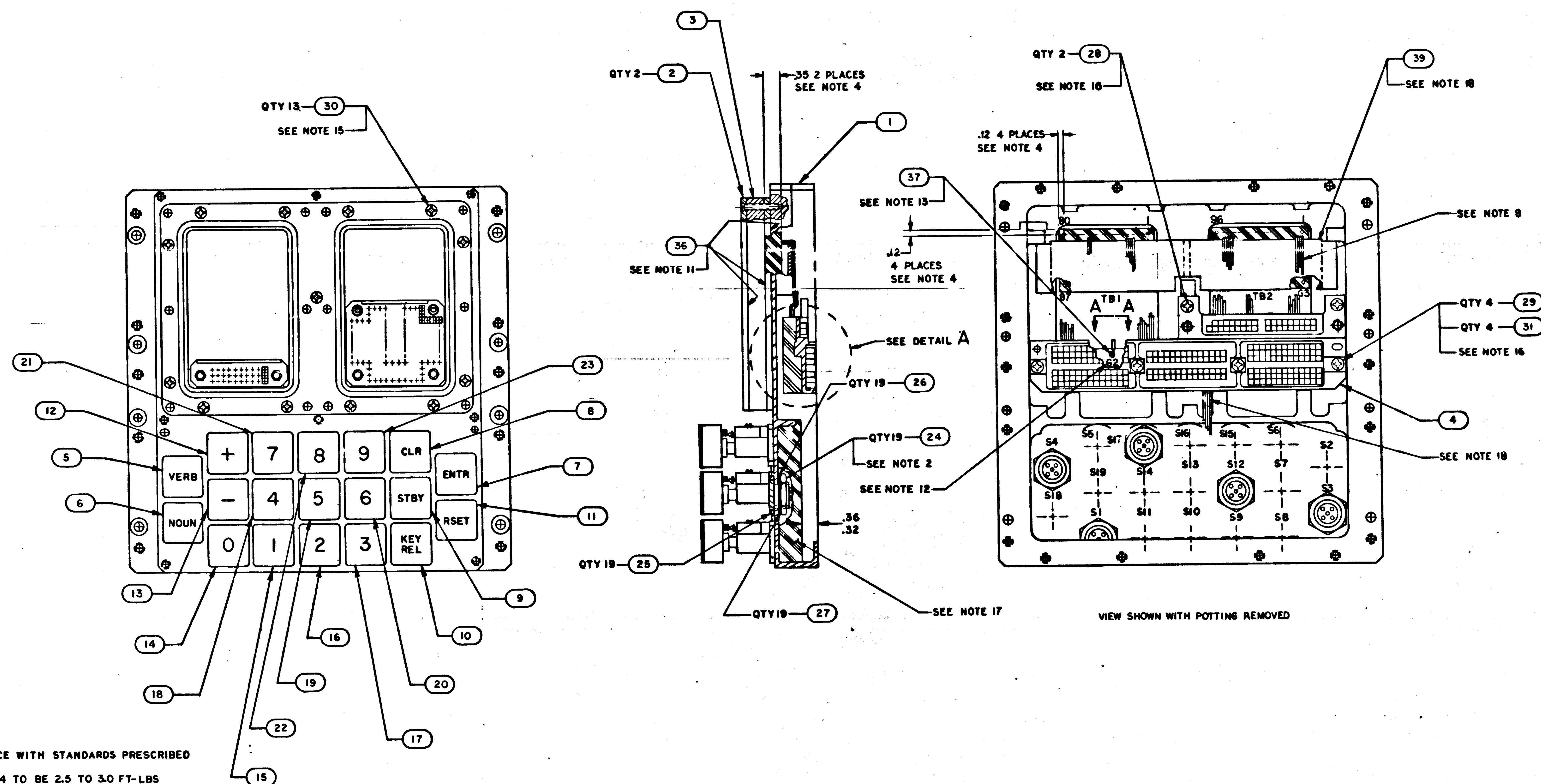
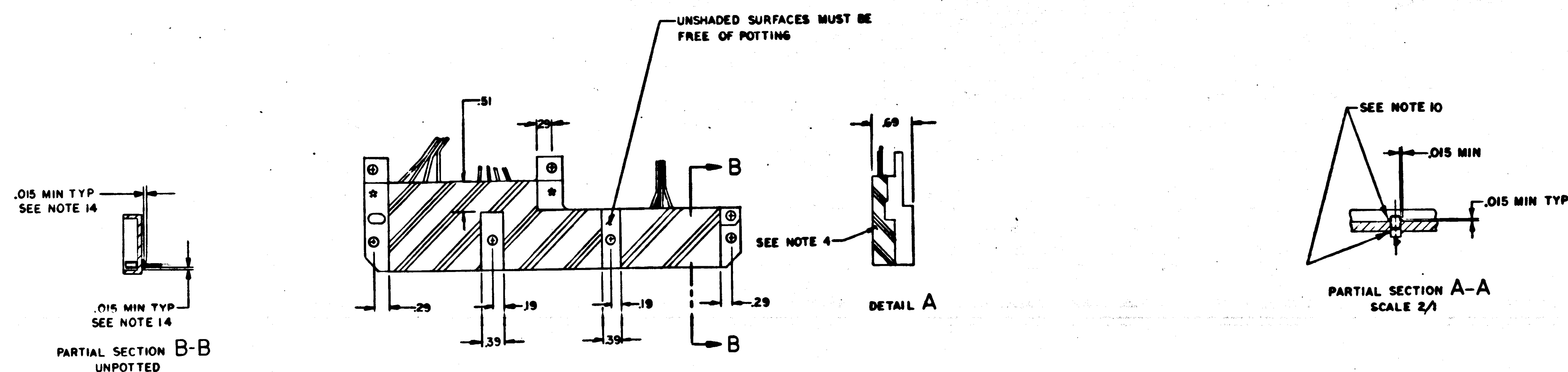
LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	SEE NOTE	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
A145		J12-32	16	OPT	30	AR	J2-78		
A146		-31					J2-70		
A147		-30					J1-53		
A148		-29					-36		
A149		-28					-21		
A150		-27					-22		
A151		-25					-84		
A152		-24					-29		
A153		-23					-39		
A154		-22					-34		
A155		-21					-30		
A156	SEE NOTE 10	-18					-55		SEE NOTE 10
A157		-17					-43		
A158		-16					-49		
A159		-15					J1-18		
A160		-13					J4-84		
A161		-12					J1-56		
A162		-11					-50		
A163		-10					-41		
A164		-9					-40		
A165		-7					-83		
A166		-6					-60		
A167		-5					-54		
A168		-4					-38		
A169		-3					-42		
A170		J12-1	16	OPT	30		J1-82		
A171		J12-183	17	WHT	26	AR	G1		SEE NOTE 13

2003885 A

2003885

QTY REQ	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIG NO.
LIST OF MATERIALS			
MANNED SPACECRAFT CENTER HOUSTON, TEXAS			
MAIN HOUSING ASSEMBLY AGC DSKY			
NESA APPROVAL		CODE IDENT NO	NESA DRAWING NO
80230 J		2003885	
SCALE NONE		SHEET 3 OF 3	

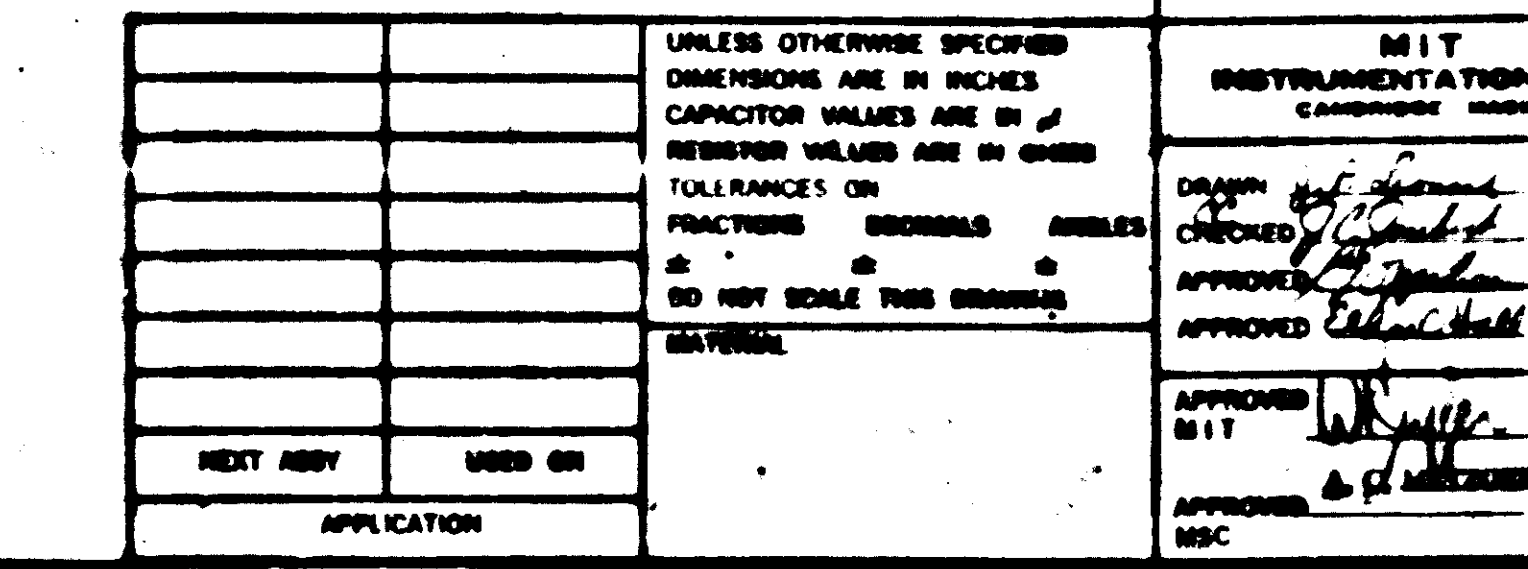
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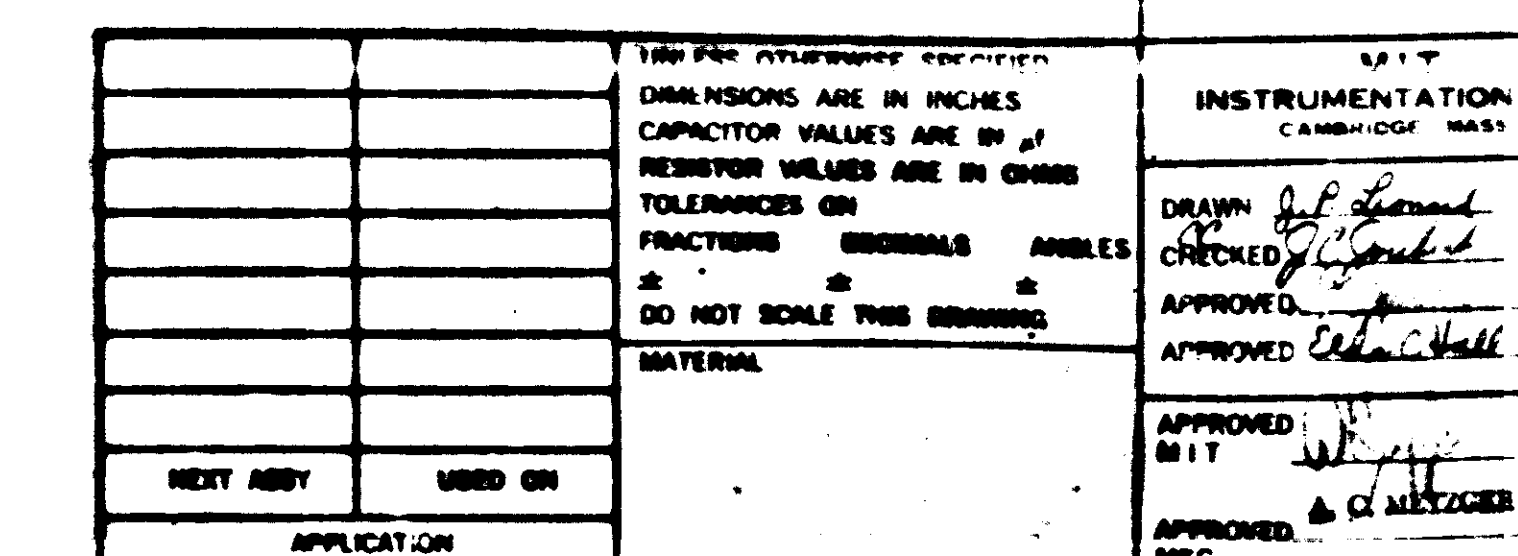


- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MOUNTING TORQUE FOR FIND NO.24 TO BE 2.5 TO 3.0 FT-LBS
 3. IDENTIFY WITH PART NO. PER NDIO02019
 4. ENCAPSULATE INDICATED AREAS PER NDIO02236
 5. SOLDER PER ND IO02071 USING SOLDER PER NDIO02075
 6. WELD PER NDIO02005
 7. A/B DENOTES AS REQUIRED
 8. BOND FIND NO.32,33,38, 40 & 41 TO FIND NO. 39 PER NDIO02004, TYPE **II**
 9. DRESS AND TRIM AT ASSEMBLY USING FIND NO.34
 10. SEAL FIND NO.37 TO FIND NO.1 PER NDIO02004 TYPE **II**
 11. APPLY FIND NO.36 TO INDICATED SURFACES OF FIND NO.2.
DO NOT APPLY TO BONDED RUBBER
 12. MARK .07/10 HIGH BLACK CHARACTERS PER NDIO02019 AND NDIO02122
TYPE **II** CLASS 2, USING MARKING INK IO06271-II
 13. MOUNTING TORQUE FOR FIND NO.37 TO BE 15-20 INCH OUNCES
 14. SEAL INSULATORS ON FIND NO.4 PER NDIO02004 TYPE **II**
 15. MOUNTING TORQUE FOR FIND NO.30 TO BE 3.5-4.5 INCH POUNDS
 16. MOUNTING TORQUE FOR FIND NO.28 AND FIND NO.29 TO BE 8 TO 9
INCH POUNDS
 17. ENCAPSULATE PER ND
 18. BOND FIND NO.39 & WIRES FROM S1 THRU S19 TO FIND NO.1 PER NDIO02004, TYPE **II**

X 2005953		INTERCONNECTING DIAGRAM	
AR	1010807-22	WIRE INSULATED	
AR	1010416-14	WIRE INSULATED	
I	2004898	SUPPORT, WIRE	
AR	1010416-13	WIRE INSULATED	
I	2004039	TERMINAL, THREADED	
AR	1006879	SILICONE COMPOUND	
AR	1010416-15	WIRE INSULATED	
AR	1012507-003	TAPE, LACING	
AR	1010416-20	WIRE INSULATED	
AR	1010848-1	WIRE INSULATED	
I	M5520-6L	WASHER, FLAT	
13	M551959-20	SCREW, FLAT HD, CR	SS RECESSED
4	M551957-30	SCREW, PAN HD, CR	SS RECESSED
2	M551959-28	SCREW, FLAT HD, CR	SS RECESSED
19	1010635-003	WASHER, LOCK	
19	2004940	WASHER, PLAIN	
19	1000159-7	O RING SEAL	
19	2004942	NUT, HEX	
I	2003984-211	SWITCH, ASSEMBLY	PUSH-BUTTON
I	-131		
I	-181		
I	-171		
I	-161		
I	-151		
I	-141		
I	-131		
I	-121		
I	-111		
I	-091		
I	-081		
I	-071		
I	-061		
I	-051		
I	-041		
I	-031		
I	-021		
I	2003184-0-011	SWITCH, ASSEMBLY	PUSH-BUTTON
I	2003948-011	CONNECTOR, PLAT	ASSEMBLY
I	2003959-011	ADAPTER, PLATE	ASSEMBLY
2	006351	GASKET, PREFORMED	
I	2004968-011	HOUSING, FRONT	
QTY REQ	PART OF IDENTIFYING NO.	NO. OF MATERIALS BY SIGNATURE OR BY STAMP	

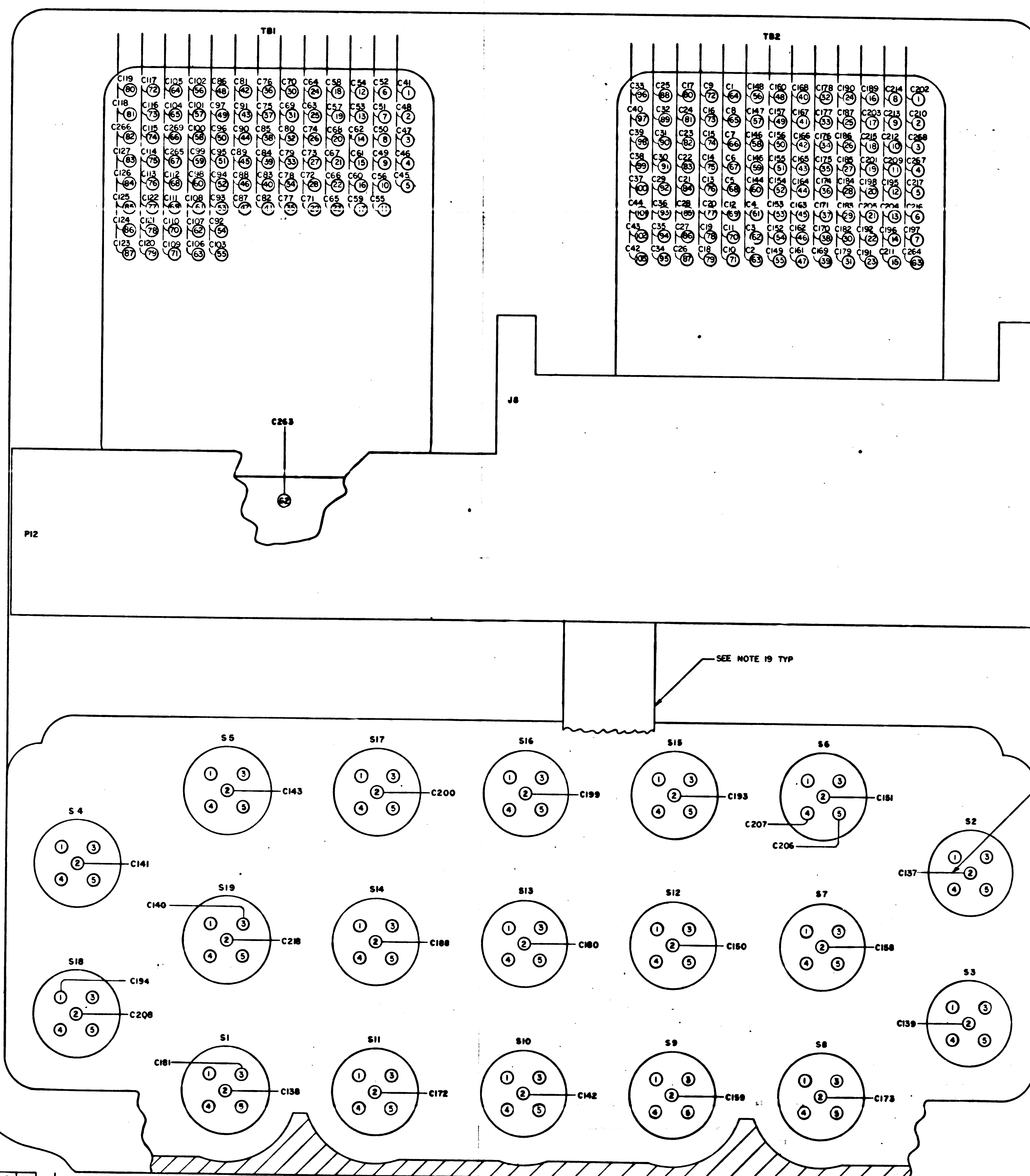
DIMENSION: .41 IN INCHES CAPACITOR VALUES ARE IN μ RESISTOR VALUES ARE IN OHMS TOLERANCES ON FRACTIONS = .01 DO NOT SCALE THIS DRAWING		INSTRUMENTATION LAB CAMDEN, NJ 08102		DRAWN BY: <i>W. J. L. L. L.</i> CHECKED BY: <i>W. J. L. L. L.</i> APPROVED BY: <i>W. J. L. L. L.</i> APPROVED DATE: <i>11/15/84</i>		FRONT HOUSING ASSEMBLY AGI: DSKY	
MATERIAL 2003950 NEXT ASBY USED ON APPLICATION		APPROVED BY: <i>W. J. L. L. L.</i> APPROVED DATE: <i>11/15/84</i> S. E. M. M. M.		CODE IDENT NO. 80230 SCALE 1/1		DIMENSION NO. 2003949	





D	2003949
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SYM	DOSE	
A		R
B		R
C		R
D		R



—SEE NOTE 19 TYPE

—SEE NOTE 9

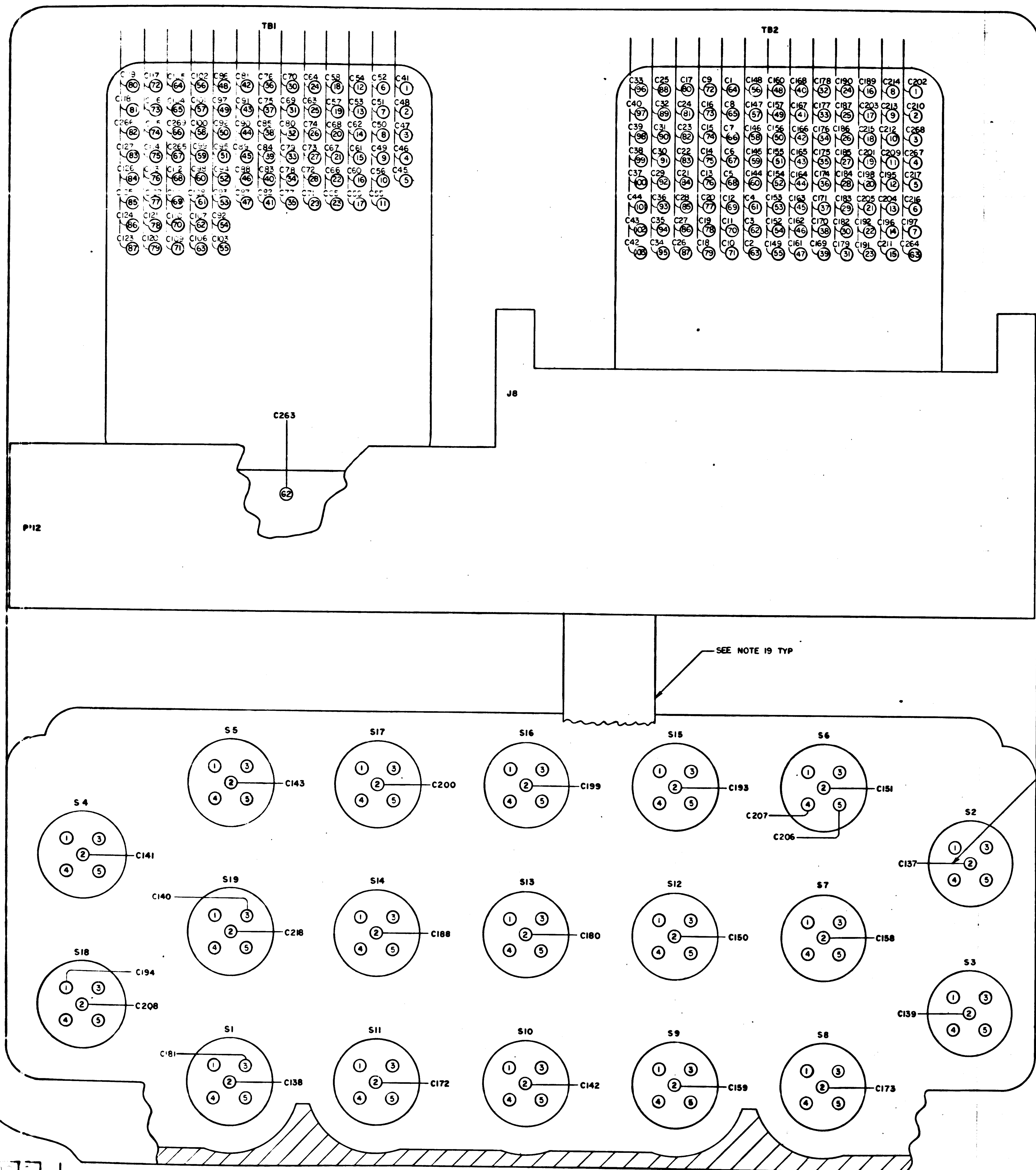
2003949	D
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SIH 2/3

F-117

[illegible]

		REVIEWS				
SYM	BONE	DESCRIPTION	DR	CH	DATE	APPROV
A		REVISED PER TORR 26856	1PT	2PT	4/16/68	207
B		REVISED PER TORR 27913	APT	2PT	5-5-68	207
C		REVISED PER TORR 28178	APT	1-1	5-7-68	207
D		REVISED PER TORR 29705	2-11-68	2-2	5-7-68	207
E		REVISED PER TORR 32580	2-11-68	2-2	5-7-68	207

[illegible]

QTY	PART OR IDENTIFYING NO	MATERIAL OR ITEM'S	DESCRIPTION, ATTACHMENT OR IDENTIFICATION	FR. NO.
LIST OF MATERIALS				
M.I.T. INSTRUMENTATION LAB CAMBRIDGE, MASS.		MANNED SPACECRAFT CENTER HOUSTON, TEXAS		
DESIGNED BY <i>W. J. M. J.</i>	<i>2003345</i>	FRONT HOUSING ASSEMBLY		
CHECKED BY <i>W. J. M. J.</i>	<i>2003345</i>			
APPROVED BY <i>W. J. M. J.</i>	<i>2003345</i>			
APPROVED BY <i>W. J. M. J.</i>	<i>2003345</i>			
		AGC DSKY		
APPROVED BY <i>W. J. M. J.</i>	<i>2003345</i>	CODE IDENT NO	SIZE	DRAWING NO.
BY <i>W. J. M. J.</i> A. S. MANNING		80230	J	2003949
APPROVED BY <i>W. J. M. J.</i>	<i>2003345</i>	DATE	SCALE	NOTE
			NONE	

5003849

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C1		P12-131	32	WHT	26	AR	TB2-64		
C2		-132					TB2-63		
C3		-133					TB2-62		
C4		-134					TB2-61		
C5		-127					TB2-68		
C6		-128					TB2-67		
C7		-129					TB2-66		
C8		-130					TB2-65		
C9		-123					TB2-72		
C10		-124					TB2-71		
C11		-125					TB2-70		
C12		-126					TB2-69		
C13		-119					TB2-75		
C14		-120					TB2-74		
C15		-121					TB2-73		
C16		-122					TB2-72		
C17		-115					TB2-80		
C18		-116					TB2-79		
C19		-117					TB2-78		
C20		-118					TB2-77		
C21		-111					TB2-84		
C22		-112					TB2-83		
C23		-113					TB2-82		
C24		-114					TB2-81		
C25		-107					TB2-88		
C26		-108					TB2-87		
C27		-109					TB2-86		
C28		-110					TB2-85		
C29		-103					TB2-92		
C30		-104					TB2-91		
C31		-105					TB2-90		
C32		-106					TB2-89		
C33		-99					TB2-96		
C34		-100					TB2-95		
C35		-101					TB2-94		
C36		-102					TB2-93		
C37		-95					TB2-100		
C38		-96					TB2-99		
C39		-97					TB2-98		
C40		-98					TB2-97		
C41		-91					TB1-1		
C42		-92					TB2-103		
C43		-93					TB2-102		
C44	SEE NOTE 6	-94					TB2-101	SEE NOTE 6	
C45		-87					TB1-5		
C46		-88					TB1-4		
C47		-89					TB1-3		
C48		-90					TB1-2		
C49		-83					TB1-9		
C50		-84					TB1-8		
C51		-85					TB1-7		
C52		-86					TB1-6		
C53		-79					TB1-13		
C54		-80					TB1-12		
C55		-81					TB1-11		
C56		-82					TB1-10		
C57		-73					TB1-19		
C58		-74					TB1-18		
C59		-75					TB1-17		
C60		-76					TB1-16		
C61		-77					TB1-15		
C62		-78					TB1-14		
C63		-67					TB1-25		
C64		-68					TB1-24		
C65		-69					TB1-23		
C66		-70					TB1-22		
C67		-71					TB1-21		
C68		-72					TB1-20		
C69		-61					TB1-31		
C70		-62					TB1-30		
C71		-63					TB1-29		
C72		-64					TB1-28		
C73		-65					TB1-27		
C74		-66					TB1-26		
C75		-55					TB1-37		
C76		-56					TB1-36		
C77		-57					TB1-35		
C78		-58					TB1-34		
C79		-59					TB1-33		
C80		-60					TB1-32		
C81		-50					TB1-42		
C82		-51					TB1-41		
C83		-52					TB1-40		
C84		-53					TB1-39		
C85		-54					TB1-38		
C86		-43					TB1-48		
C87		-44					TB1-47		
C88		P12-45	32	WHT	26	AR	TB1-46		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C89		P12-46	32	WHT	26	AR	TB1-45		
C90		-47					TB1-44		
C91		-48					TB1-43		
C92		-49					TB1-42		
C93		-38					TB1-53		
C94		-39					TB1-52		
C95		-40					TB1-51		
C96		-41					TB1-50		
C97		-42					TB1-49		
C98		-31					TB1-60		
C99		-32					TB1-59		
C100		-33					TB1-58		
C101		-34					TB1-57		
C102		-35					TB1-56		
C103		-36					TB1-55		
C104		-25					TB1-64		
C105		-27					TB1-63		
C106	SEE NOTE 6	-28					TB1-62	SEE NOTE 6	
C107		-29					TB1-61		
C108		-30					TB1-60		
C109		-21					TB1-71		
C110		-22					TB1-70		
C111		-23					TB1-69		
C112		-24					TB1-68		
C113		-13					TB1-75		
C114		-15					TB1-74		
C115		-16					TB1-73		
C116		-17					TB1-72		
C117		-18					TB1-71		
C118		-7					TB1-81		
C119		-9					TB1-80		
C120		-10					TB1-79		
C121		-11					TB1-78		
C122		-12					TB1-77		
C123		-1					TB1-87		
C124		-3					TB1-86		
C125		-4					TB1-85		
C126		-5					TB1-84		
C127		P12-6	32	WHT			TB1-83		
C128		S16-1	35	YEL			S17-3		
C129		S5-4	38	RED			S19-4		
C130		S5-5	40	ORN			S19-5		
C131		S19-4	38	RED			S1-4		
C132		S19-5	40	ORN			S1-5		
C133		S1-4	38	RED			S18-4		
C134		S1-5	40	ORN			S18-5		
C135		S18-4	38	RED			S4-4		
C136	SEE NOTE 5	S18-5	40	ORN			S4-5	SEE NOTE 5	
C137		J8-3	33	WHT			S2-2		
C138		-5					S3-2		
C139		-8					S19-3		
C140		-9					S4-2		
C141		-10					S10-2		
C142		-11					S5-2		
C143		J8-13	33				TB2-60		
C144		P12-135	32				TB2-59		
C145		-136					TB2-58		
C146	SEE NOTE 6	-137					TB2-57	SEE NOTE 6	
C147		-138					TB2-56		
C148		-139					TB2-55		
C149		P12-140	32				TB2-54		
C150	SEE NOTE 5	J8-14	33				S12-2	SEE NOTE 5	
C151		J8-15	33				S6-2		
C152		P12-141	32				TB2-53		
C153		-142					TB2-52		
C154	SEE NOTE 6	-143					TB2-51	SEE NOTE 6	
C155		-144					TB2-50		
C156		-145					TB2-49		
C157		P12-146	32				S7-2		
C158	SEE NOTE 5	J8-16	33				S9-2	SEE NOTE 5	
C159		J8-17	33				TB2-48		
C160		P12-147	32				-47		
C161		-148					-46		
C162		-149					-45		
C163		-150					-44		
C164		-151					-43		
C165	SEE NOTE 6	-152					-42	SEE NOTE 6	
C166		-153					-41		
C167		-154					-40		
C168		-155					-39		
C169		-156					-38		
C170		-157					TB2-37		
C171		P12-158	32				S11-2		
C172	SEE NOTE 5	J8-18	33				S8-2	SEE NOTE 5	
C173		J8-19	33				TB2-36		
C174		P12-159	32				TB2-35		
C175	SEE NOTE 6	P12-160	32	WHT	26	AR	TB2-34	SEE NOTE 6	
C176		P12-161	32						

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C177		P12-162	32	WHT	26	AR	TB2-33		
C178	SEE NOTE 6	P12-163	32				TB2-32	SEE NOTE 6	
C179		P12-164	32				TB2-31		
C180	SEE NOTE 5	J8-20	33				S13-2	SEE NOTE 5	
C181		J8-21	33				S1-3		
C182		P12-165	32				TB2-30		
C183		-166					-29		
C184	SEE NOTE 6	-167					-28	SEE NOTE 6	
C185		-168					-27		
C186		-169					-26		
C187		P12-170	32				TB2-25		
C188	SEE NOTE 5	J8-22	33				S14-2	SEE NOTE 5	
C189		P12-190	32				TB2-16		
C190	SEE NOTE 6	-174					-24	SEE NOTE 6	
C191		-175					-23		
C192		P12-176	32				TB2-22		
C193	SEE NOTE 5	J8-24	33				S15-2	SEE NOTE 5	
C194		J8-25	33				S18-1		
C195	SEE NOTE 6	P12-196	32				TB2-12	SEE NOTE 6	
C196		-192					-14		
C197		-204					-7		
C198	SEE NOTE 5	P12-192	32				TB2-20	SEE NOTE 5	
C199		J8-26	33				S16-2		
C200	SEE NOTE 6	J8-27	33				S17-2	SEE NOTE 6	
C201		P12-193	32				TB2-19		
C202		-210					-1		
C203	SEE NOTE 6	-157					-17	SEE NOTE 6	
C204		-195					-13		
C205		-181	32	WHT			TB2-21		
C206	SEE NOTE 5	-193	40	ORN			S6-5	SEE NOTE 5	
C207		P12-195	32	RED			S6-4		
C208		J8-30	33	WHT			S18-2		
C209		P12-197	32	WHT			TB2-11		
C210		-209					-2		
C211	SEE NOTE 6	-91					-15	SEE NOTE 6	
C212		-201					-10		
C213		-202					-9		
C214		-203					-8		
C215		-186					-18		
C216		-207					-6		
C217		-208	32	WHT			TB2-5		
C218		P12-179	33	WHT			S13-2		
C219		S1-1	35	YEL			S2-3		
C220		S2-1					S3-3		
C221		S3-1					S4-3		
C222		S4-1					S5-3		
C223		S6-1					S6-3		
C224		S6-1					S7-3		
C225		S7-1					S8-3		
C226		S8-1					S9-3		
C227		S9-1					S10-3		
C228		S10-1					S11-3		
C229		S11-1					S12-3		
C230		S12-1					S13-3		
C231		S13-1					S14-3		
C232		S14-1					S15-3		
C233	SEE NOTE 5	S15-1	35	YEL			S16-3	SEE NOTE 5	
C234		S17-4	38	RED			S5-4		
C235		S17-5	40	ORN			S5-5		
C236		S6-4	38	RED			S2-4		
C237		S6-5	40	ORN			S2-5		
C238		S2-4	38	RED			S7-4		
C239		S2-5	40	ORN			S7-5		
C240		S7-4	38	RED			S3-4		
C241		S7-5	40	ORN			S3-5		
C242		S3-4	38	RED			S8-4		
C243		S3-5	40	ORN			S8-5		
C244		S8-4	38	RED			S9-4		
C245		S8-5	40	ORN			S9-5		
C246		S9-4	38	RED			S2-4		
C247		S9-5	40	ORN			S2-5		
C248		S2-4	38	RED			S15-4		
C249		S2-5	40	ORN			S15-5		
C250		S5-4	38	RED			S6-4		
C251		S5-5	40	ORN			S6-5		
C252		S16-4	38	RED			S13-4		
C253		S16-5	40	ORN			S13-5		
C254		S13-4	38	RED			S20-4		
C255		S13-5	40	ORN			S20-5		
C256		S10-4	38	RED			S11-4		
C257		S10-5	40	ORN			S11-5		
C258		S11-4	38	RED			S14-4		
C259		S11-5	40	ORN			S14-5		
C260		S14-4	38	RED			S17-4		
C261		S14-5	40	ORN			S17-5		
C262		S17-1	35	YEL			S18-3		
C263	SEE NOTE 6	P12-184	32	WHT			63	SEE NOTE 6	
C264	SEE NOTE 6	P12-183	41				62	SEE NOTE 6	
C265		P12-20	32				TB1-67		
C266	SEE NOTE 6	P12-8					TB1-82	SEE NOTE 6	
C267		P12-173					TB2-4		
C268		P12-177					TB2-3		
C269		P12-19	32	WHT	26	AR	TB1-66		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C1		P12-131	32	WHT	26	AR	TB2-64		
C2		-132					TB2-63		
C3		-133					TB2-62		
C4		-134					TB2-61		
C5		-135					TB2-60		
C6		-136					TB2-59		
C7		-137					TB2-58		
C8		-138					TB2-57		
C9		-139					TB2-56		
C10		-140					TB2-55		
C11		-141					TB2-54		
C12		-142					TB2-53		
C13		-143					TB2-52		
C14		-144					TB2-51		
C15		-145					TB2-50		
C16		-146					TB2-49		
C17		-147					TB2-48		
C18		-148					TB2-47		
C19		-149					TB2-46		
C20		-150					TB2-45		
C21		-151					TB2-44		
C22		-152					TB2-43		
C23		-153					TB2-42		
C24		-154					TB2-41		
C25		-155					TB2-40		
C26		-156					TB2-39		
C27		-157					TB2-38		
C28		-158					TB2-37		
C29		-159					TB2-36		
C30		-160					TB2-35		
C31		-161					TB2-34		
C32		-162					TB2-33		
C33		-163					TB2-32		
C34		-164					TB2-31		
C35		-165					TB2-30		
C36		-166					TB2-29		
C37		-167					TB2-28		
C38		-168					TB2-27		
C39		-169					TB2-26		
C40		-170					TB2-25		
C41		-171					TB2-24		
C42		-172					TB2-23		
C43		-173					TB2-22		
C44		-174					TB2-21		
C45		-175					TB2-20		
C46		-176					TB2-19		
C47		-177					TB2-18		
C48		-178					TB2-17		
C49		-179					TB2-16		
C50		-180					TB2-15		
C51		-181					TB2-14		
C52		-182					TB2-13		
C53		-183					TB2-12		
C54		-184					TB2-11		
C55		-185					TB2-10		
C56		-186					TB2-9		
C57		-187					TB2-8		
C58		-188					TB2-7		
C59		-189					TB2-6		
C60		-190					TB2-5		
C61		-191					TB2-4		
C62		-192					TB2-3		
C63		-193					TB2-2		
C64		-194					TB2-1		
C65		-195					TB2-0		
C66		-196					TB2-0		
C67		-197					TB2-0		
C68		-198					TB2-0		
C69		-199					TB2-0		
C70		-200					TB2-0		
C71		-201					TB2-0		
C72		-202					TB2-0		
C73		-203					TB2-0		
C74		-204					TB2-0		
C75		-205					TB2-0		
C76		-206					TB2-0		
C77		-207					TB2-0		
C78		-208					TB2-0		
C79		-209					TB2-0		
C80		-210					TB2-0		
C81		-211					TB2-0		
C82		-212					TB2-0		
C83		-213					TB2-0		
C84		-214					TB2-0		
C85		-215					TB2-0		
C86		-216					TB2-0		
C87		-217					TB2-0		
C88		-218					TB2-0		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C89		P12-46	32	WHT	26	AR	TB1-45		
C90		-47					TB1-44		
C91		-48					TB1-43		
C92		-49					TB1-42		
C93		-50					TB1-41		
C94		-51					TB1-40		
C95		-52					TB1-39		
C96		-53					TB1-38		
C97		-54					TB1-37		
C98		-55					TB1-36		
C99		-56					TB1-35		
C100		-57					TB1-34		
C101		-58					TB1-33		
C102		-59					TB1-32		
C103		-60					TB1-31		
C104		-61					TB1-30		
C105		-62					TB1-29		
C106		-63					TB1-28		
C107		-64					TB1-27		
C108		-65					TB1-26		
C109		-66					TB1-25		
C110		-67					TB1-24		
C111		-68					TB1-23		
C112		-69					TB1-22		
C113		-70					TB1-21		
C114		-71					TB1-20		
C115		-72					TB1-19		
C116		-73					TB1-18		
C117		-74					TB1-17		
C118		-75					TB1-16		
C119		-76					TB1-15		
C120		-77					TB1-14		
C121		-78					TB1-13		
C122		-79					TB1-12		
C123		-80					TB1-11		
C124		-81					TB1-10		
C125		-82					TB1-9		
C126		-83					TB1-8		
C127		-84					TB1-7		
C128		-85					TB1-6		
C129		-86					TB1-5		
C130		-87					TB1-4		
C131		-88					TB1-3		
C132		-89					TB1-2		
C133		-90					TB1-1		
C134		-91					TB1-0		
C135		-92					TB1-0		
C136		-93					TB1-0		
C137		-94					TB1-0		
C138		-95					TB1-0		
C139		-96					TB1-0		
C140		-97					TB1-0		
C141		-98					TB1-0		
C142		-99					TB1-0		
C143		-100					TB1-0		
C144		-101					TB1-0		
C145		-102					TB1-0		
C146		-103					TB1-0		
C147		-104					TB1-0		
C148		-105					TB1-0		
C149		-106					TB1-0		
C150		-107					TB1-0		
C151		-108					TB1-0		
C152		-109					TB1-0		
C153		-110					TB1-0		
C154		-111					TB1-0		
C155		-112					TB1-0		
C156		-113					TB1-0		
C157		-114					TB1-0		
C158		-115					TB1-0		
C159		-116					TB1-0		
C160		-117					TB1-0		
C161		-118					TB1-0		
C162		-119					TB1-0		
C163		-120					TB1-0		
C164		-121					TB1-0		
C165		-122					TB1-0		
C166		-123					TB1-0		
C167		-124					TB1-0		
C168		-125					TB1-0		
C169		-126					TB1-0		
C170		-127					TB1-0		
C171		-128					TB1-0		
C172		-129					TB1-0		
C173		-130					TB1-0		
C174		-131					TB1-0		
C175		-132					TB1-0		
C176		-133					TB1-0		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C177		P12-162	32	WHT	26		TB2-33		
C178	SEE NOTE 6	P12-163	32				TB2-32	SEE NOTE 6	
C179		P12-164	32				TB2-31		
C180	SEE NOTE 5	J8-20	33				TB2-30	SEE NOTE 5	
C181		J8-21	33				TB2-29		
C182		P12-165	32				TB2-28		
C183		-166					TB2-27		
C184	SEE NOTE 6	-167					TB2-26	SEE NOTE 6	
C185		-168					TB2-25		
C186		-169					TB2-24		
C187		P12-170	32				TB2-23		
C188	SEE NOTE 5	J8-22	33				TB2-22	SEE NOTE 5	
C189		P12-190	32				TB2-21		
C190	SEE NOTE 6	-174					TB2-20	SEE NOTE 6	
C191		-175					TB2-19		
C192		P12-176	32				TB2-18		
C193	SEE NOTE 5	J8-24	33				TB2-17	SEE NOTE 5	
C194		J8-25	33				TB2-16		
C195		P12-196	32				TB2-15		
C196	SEE NOTE 6	-192					TB2-14	SEE NOTE 6	
C197		-193					TB2-13		
C198		P12-182	32				TB2-12		
C199	SEE NOTE 5	J8-26	33				TB2-11	SEE NOTE 5	
C200		J8-27	33				TB2-10		
C201		P12-185	32				TB2-9		
C202	SEE NOTE 6	-210					TB2-8	SEE NOTE 6	
C203		-187					TB2-7		
C204		-196					TB2-6		
C205		-181	32	WHT			TB2-5		
C206	SEE NOTE 8	-182	40	ORN			TB2-4	SEE NOTE 8	
C207		P12-194	36	RED			TB2-3		
C208		J8-30	33	WHT			TB2-2		
C209		P12-197	32	WHT			TB2-1		
C210		-209					TB2-0		
C211		-191					TB2-0		
C212	SEE NOTE 6	-201					TB2-0	SEE NOTE 6	
C213		-202					TB2-0		
C214		-203					TB2-0		
C215		-186					TB2-0		
C216		-207					TB2-0		
C217		-208	32	WHT			TB2-5		
C218		P12-179	33	WHT			TB2-5		
C219		S1-1	35	YEL			TB2-3		
C220		S2-1	38	RED			TB2-3		
C221		S3-1	40	ORN			TB2-3		
C222		S4-1	40	ORN			TB2-3		
C223		S5-1	40	ORN			TB2-3		
C224		S6-1	40	ORN			TB2-3		
C225		S7-1	40	ORN			TB2-3		
C226		S8-1	40	ORN			TB2-3		
C227		S9-1	40	ORN			TB2-3		
C228		S10-1	40	ORN			TB2-3		
C229		S11-1	40	ORN			TB2-3		
C230		S12-1	40	ORN			TB2-3		
C231		S13-1	40	ORN			TB2-3		
C232		S14-1	40	ORN			TB2-3		
C233	SEE NOTE 5	S15-1	35	YEL			TB2-3	SEE NOTE 5	
C234		S17-4	38	RED			TB2-3		
C235		S17-5	40	ORN			TB2-3		
C236		S6-4	38	RED			TB2-3		
C237		S6-5	40	ORN			TB2-3		
C238		S2-4	38	RED			TB2-3		
C239		S2-5	40	ORN			TB2-3		
C240		S7-4	38	RED			TB2-3		
C241		S7-5	40	ORN			TB2-3		
C242		S3-4	38	RED			TB2-3		
C243		S3-5	40	ORN			TB2-3		
C244		S8-4	38	RED			TB2-3		
C245		S8-5	40	ORN			TB2-3		
C246		S9-4	38	RED			TB2-3		
C247		S9-5	40	ORN			TB2-3		
C248		S12-4	38	RED			TB2-3		
C249		S12-5	40	ORN			TB2-3		
C250		S15-4	38	RED			TB2-3		
C251		S6-5	40	ORN			TB2-3		
C252		S6-4	38	RED			TB2-3		
C253		S16-5	40	ORN			TB2-3		
C254		S13-4	38	RED			TB2-3		
C255		S13-5	40	ORN			TB2-3		
C256		S10-4	38	RED			TB2-3		
C257		S10-5	40	ORN			TB2-3		
C258		S11-4	38	RED			TB2-3		
C259		S11-5	40	ORN			TB2-3		
C260		S14-4	38	RED			TB2-3		
C261		S14-5	40	ORN			TB2-3		
C262		S17-1	35	YEL			TB2-3		
C263	SEE NOTE 6	P12-184	32	WHT			TB2-3	SEE NOTE 6	
C264	SEE NOTE 6	P12-183	41				TB2-3	SEE NOTE 6	
C265	SEE NOTE 8	P12-20	32				TB2-3	SEE NOTE 8	
C266		P12-8					TB2-3		
C267		P12-173					TB2-3		
C268		P12-177					TB2-3		
C269		P12-19	32	WHT			TB2-3		

LEAD ELECTRICAL							
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO
C1		P12-131	32	WHT	26	AR	TB2-64
C2		-132					TB2-63
C3		-133					TB2-62
C4		-134					TB2-61
C5		-127					TB2-68
C6		-128					TB2-67
C7		-129					TB2-66
C8		-130					TB2-65
C9		-123					TB2-72
C10		-124					TB2-71
C11		-125					TB2-70
C12		-126					TB2-69
C13		-119					TB2-76
C14		-120					TB2-75
C15		-121					TB2-74
C16		-122					TB2-73
C17		-115					TB2-80
C18		-116					TB2-79
C19		-117					TB2-78
C20		-118					TB2-77
C21		-111					TB2-84
C22		-112					TB2-83
C23		-113					TB2-82
C24		-114					TB2-81
C25		-107					TB2-88
C26		-108					TB2-87
C27		-109					TB2-86
C28		-110					TB2-85
C29		-103					TB2-92
C30		-104					TB2-91
C31		-105					TB2-90
C32		-106					TB2-89
C33		-99					TB2-97
C34		-100					TB2-96
C35		-101					TB2-94
C36		-102					TB2-93
C37		-95					TB2-100
C38		-96					TB2-99
C39		-97					TB2-98
C40		-98					TB2-97
C41		-91					TB1-1
C42		-92					TB2-103
C43		-93					TB2-102
C44		-94					TB2-101
C45	SEE NOTE 6	-87					TB1-5
C46		-88					TB1-4
C47		-89					TB1-3
C48		-90					TB1-2
C49		-83					TB1-9
C50		-84					TB1-8
C51		-85					TB1-7
C52		-86					TB1-6
C53		-79					TB1-13
C54		-80					TB1-12
C55		-81					TB1-11
C56		-82					TB1-10
C57		-73					TB1-19
C58		-74					TB1-18
C59		-75					TB1-17
C60		-76					TB1-16
C61		-77					TB1-15
C62		-78					TB1-14
C63		-67					TB1-25
C64		-68					TB1-24
C65		-69					TB1-23
C66		-70					TB1-22
C67		-71					TB1-21
C68		-72					TB1-20
C69		-61					TB1-31
C70		-62					TB1-30
C71		-63					TB1-29
C72		-64					TB1-28
C73		-65					TB1-27
C74		-66					TB1-26
C75		-56					TB1-36
C76		-57					TB1-35
C77		-58					TB1-34
C78		-59					TB1-33
C79		-60					TB1-32
C80		-50					TB1-42
C81		-51					TB1-41
C82		-52					TB1-40
C83		-53					TB1-39
C84		-54					TB1-38
C85		-43					TB1-48
C86		-44					TB1-47
C87		-45					TB1-46
C88		P12-45	32	WHT	26	AR	TB1-46

LEAD ELECTRICAL							
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO
C89		P12-46	32	WHT	26	AR	TB1-45
C90		-47					TB1-44
C91		-48					TB1-43
C92		-37					TB1-54
C93		-38					TB1-53
C94		-39					TB1-52
C95		-40					TB1-51
C96		-41					TB1-50
C97		-42					TB1-49
C98		-31					TB1-60
C99		-32					TB1-59
C100		-33					TB1-58
C101		-34					TB1-57
C102		-35					TB1-56
C103		-36					TB1-55
C104		-25					TB1-65
C105		-27					TB1-64
C106		-28					TB1-63
C107	SEE NOTE 6	-29					TB1-62
C108		-30					TB1-61
C109		-21					TB1-71
C110		-22					TB1-70
C111		-23					TB1-69
C112		-24					TB1-68
C113		-13					TB1-76
C114		-15					TB1-74
C115		-16					TB1-73
C116		-17					TB1-72
C117		-18					TB1-81
C118		-7					TB1-80
C119		-9					TB1-79
C120		-10					TB1-78
C121		-11					TB1-77
C122		-12					TB1-77
C123		-1					TB1-87
C124		-3					TB1-86
C125		-4					TB1-85
C126		-5					TB1-84
C127		P12-6	32	WHT			TB1-83
C128		S16-1	35	YEL			S17-3
C129		S5-4	38	RED			S19-4
C130		S5-5	40	ORN			S19-3
C131		S19-4	38	RED			S1-4
C132		S19-5	40	ORN			S1-5
C133		S1-4	38	RED			S18-4
C134		S1-5	40	ORN			S18-5
C135	SEE NOTE 5	S18-4	38	RED			S4-4
C136		S18-5	40	ORN			S4-5
C137		J8-3	33	WHT			S2-2
C138		J-5					S1-2
C139		-8					S3-2
C140		-9					S19-3
C141		-10					S4-2
C142		-11					S10-2
C143		J8-13	33				S5-2
C144		P12-135	32				TB2-60
C145		J-136					TB2-59
C146	SEE NOTE 6	-137					TB2-58
C147		-138					TB2-57
C148		J-139					TB2-56
C149		P12-140	32				TB2-55
C150	SEE NOTE 5	J8-14	33				S12-2
C151		J8-15	35				S6-2
C152		P12-141	32				TB2-54
C153		-142					TB2-53
C154	SEE NOTE 6	-143					TB2-52
C155		-144					TB2-51
C156		-145					TB2-50
C157		P12-146	32				TB2-49
C158	SEE NOTE 5	J8-16	33				S7-2
C159		J8-17	33				S9-2
C160		P12-147	32				TB2-48
C161		-148					TB2-47
C162		-149					-46
C163		-150					-45
C164		-151					-44
C165	SEE NOTE 6	-152					-43
C166		-153					-42
C167		-154					-41
C168		-155					-40
C169		-156					-39
C170		-157					-38
C171		P12-158	32				TB2-37
C172	SEE NOTE 5	J8-18	33				S11-2
C173		J8-19	33				S8-2
C174		P12-159	32				TB2-36
C175	SEE NOTE 6	P12-160	32	WHT	26	AR	TB2-35
C176		P12-161	32	WHT	26	AR	TB2-34

LEAD ELECTRICAL								
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
C177		P12-162	32	WHT	26		TB2-33	
C178	SEE NOTE 6	P12-163	32			AR	TB2-32	SEE NOTE 6
C179		P12-164	32				TB2-31	
C180	SEE NOTE 5	J8-20	33				S13-2	SEE NOTE 5
C181		J8-21	33				C1-4	
C182		P12-165	32				TB2-30	
C183		-166					-29	
C184	SEE NOTE 6	-167					-28	SEE NOTE 6
C185		-168					-27	
C186		-169					-26	
C187		P12-170	32				TB2-25	
C188	SEE NOTE 5	J8-22	33				S14-2	SEE NOTE 5
C189		P12-170	32				TB2-16	
C190		-174					-24	
C191	SEE NOTE 6	-175					-23	SEE NOTE 6
C192		P12-176	32				TB2-22	
C193	SEE NOTE 5	J8-24	33				S15-2	SEE NOTE 5
C194		J8-25	33				S18-1	
C195		P12-196	32				TB2-12	
C196	SEE NOTE 6	-192					-14	SEE NOTE 6
C197		-204					-7	
C198		P12-182	32				TB2-20	
C199	SEE NOTE 5	J8-26	33				S16-2	SEE NOTE 5
C200		J8-27	33				S17-2	SEE NOTE 5
C201		P12-183	32				TB2-19	
C202	SEE NOTE 6	-210					-1	SEE NOTE 6
C203		-187					-17	
C204		-195					-13	
C205		-181	32	WHT			TB2-21	
C206	SEE NOTE 6	-193	40	ORN			S6-5	SEE NOTE 6
C207		P12-194	38	RED			S6-4	SEE NOTE 5
C208		J8-30	33	WHT			S18-2	
C209		P12-197	32	WHT			TB2-11	
C210		-209					-2	
C211		-191					-15	
C212	SEE NOTE 6	-201					-10	SEE NOTE 6
C213		-202					-9	
C214		-203					-8	
C215		-186					-18	
C216		-207					-6	
C217		-208	32	WHT			TB2-5	
C218		P12-179	33	WHT			S19-2	
C219		S1-1	35	YEL			S2-3	
C220		S2-1					S3-3	
C221		S3-1					S4-3	
C222		S4-1					S5-3	
C223		S6-1					S6-3	
C224		S6-1					S7-3	
C225		S7-1					S8-3	
C226		S8-1					S9-3	
C227		S9-1					S10-3	
C228		S10-1					S11-3	
C229		S11-1					S12-3	
C230		S12-1					S13-3	
C231		S13-1					S14-3	
C232		S14-1					S15-3	
C233		S15-1	35	YEL			S16-3	
C234	SEE NOTE 5	S17-4	38	RED			S17-4	
C235		S17-5	40	ORN			S17-5	
C236		S6-4	38	RED			S2-4	
C237		S6-5	40	ORN			S2-5	
C238		S4-4	38	RED			S7-4	
C239		S2-5	40	ORN			S7-5	
C240		S7-4	38	RED			S3-4	SEE NOTE 5
C241		S7-5	40	ORN			S3-5	
C242		S3-4	38	RED			S8-4	
C243		S3-5	40	ORN			S8-5	
C244		S8-4	38	RED			S9-4	
C245		S8-5	40	ORN			S9-5	
C246		S9-4	38	RED			S2-4	
C247		S9-5	40	ORN			S2-5	
C248		S12-4	38	RED			S15-4	
C249		S12-5	40	ORN			S15-5	
C250		S15-4	38	RED			S6-4	
C251		S15-5	40	ORN			S16-5	
C252		S16-4	38	RED			S13-4	
C253		S16-5	40	ORN			S13-5	
C254		S13-4	38	RED			S20-4	
C255		S13-5	40	ORN			S19-5	
C256		S10-4	38	RED			S11-4	
C257		S10-5	40	ORN			S11-5	
C258		S11-4	38	RED			S14-4	
C259		S11-5	40	ORN			S14-5	
C260		S14-4	38	RED			S7-4	
C261		S14-5	40	ORN			S7-5	
C262		S17-1	35	YEL			S18-3	
C263	SEE NOTE 6	P12-184	32	WHT			62	SEE NOTE 6
C264	SEE NOTE 6	P12-183	41				63	SEE NOTE 6
C265		P12-20	32				TB1-67	
C266	SEE NOTE 6	P12-8					TB1-82	SEE NOTE 6
C267		P12-9					TB2-4	
C268		P12-177					TB2-3	
C269		P12-19	38	WHT	26	AR	TB1-66	

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C1		P12-131	32	WHT	26	AR	TB2-64		
C2		-132					TB2-63		
C3		-133					TB2-62		
C4		-134					TB2-61		
C5		-135					TB2-60		
C6		-136					TB2-59		
C7		-137					TB2-58		
C8		-138					TB2-57		
C9		-139					TB2-56		
C10		-140					TB2-55		
C11		-141					TB2-54		
C12		-142					TB2-53		
C13		-143					TB2-52		
C14		-144					TB2-51		
C15		-145					TB2-50		
C16		-146					TB2-49		
C17		-147					TB2-48		
C18		-148					TB2-47		
C19		-149					TB2-46		
C20		-150					TB2-45		
C21		-151					TB2-44		
C22		-152					TB2-43		
C23		-153					TB2-42		
C24		-154					TB2-41		
C25		-155					TB2-40		
C26		-156					TB2-39		
C27		-157					TB2-38		
C28		-158					TB2-37		
C29		-159					TB2-36		
C30		-160					TB2-35		
C31		-161					TB2-34		
C32		-162					TB2-33		
C33		-163					TB2-32		
C34		-164					TB2-31		
C35		-165					TB2-30		
C36		-166					TB2-29		
C37		-167					TB2-28		
C38		-168					TB2-27		
C39		-169					TB2-26		
C40		-170					TB2-25		
C41		-171					TB2-24		
C42		-172					TB2-23		
C43		-173					TB2-22		
C44		-174					TB2-21		
C45		-175					TB2-20		
C46		-176					TB2-19		
C47		-177					TB2-18		
C48		-178					TB2-17		
C49		-179					TB2-16		
C50		-180					TB2-15		
C51		-181					TB2-14		
C52		-182					TB2-13		
C53		-183					TB2-12		
C54		-184					TB2-11		
C55		-185					TB2-10		
C56		-186					TB2-9		
C57		-187					TB2-8		
C58		-188					TB2-7		
C59		-189					TB2-6		
C60		-190					TB2-5		
C61		-191					TB2-4		
C62		-192					TB2-3		
C63		-193					TB2-2		
C64		-194					TB2-1		
C65		-195					TB2-0		
C66		-196					TB2-0		
C67		-197					TB2-0		
C68		-198					TB2-0		
C69		-199					TB2-0		
C70		-200					TB2-0		
C71		-201					TB2-0		
C72		-202					TB2-0		
C73		-203					TB2-0		
C74		-204					TB2-0		
C75		-205					TB2-0		
C76		-206					TB2-0		
C77		-207					TB2-0		
C78		-208					TB2-0		
C79		-209					TB2-0		
C80		-210					TB2-0		
C81		-211					TB2-0		
C82		-212					TB2-0		
C83		-213					TB2-0		
C84		-214					TB2-0		
C85		-215					TB2-0		
C86		-216					TB2-0		
C87		-217					TB2-0		
C88		-218					TB2-0		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C89		P12-46	32	WHT	26	AR	TB1-45		
C90		-47					TB1-44		
C91		-48					TB1-43		
C92		-49					TB1-42		
C93		-50					TB1-41		
C94		-51					TB1-40		
C95		-52					TB1-39		
C96		-53					TB1-38		
C97		-54					TB1-37		
C98		-55					TB1-36		
C99		-56					TB1-35		
C100		-57					TB1-34		
C101		-58					TB1-33		
C102		-59					TB1-32		
C103		-60					TB1-31		
C104		-61					TB1-30		
C105		-62					TB1-29		
C106		-63					TB1-28		
C107		-64					TB1-27		
C108		-65					TB1-26		
C109		-66					TB1-25		
C110		-67					TB1-24		
C111		-68					TB1-23		
C112		-69					TB1-22		
C113		-70					TB1-21		
C114		-71					TB1-20		
C115		-72					TB1-19		
C116		-73					TB1-18		
C117		-74					TB1-17		
C118		-75					TB1-16		
C119		-76					TB1-15		
C120		-77					TB1-14		
C121		-78					TB1-13		
C122		-79					TB1-12		
C123		-80					TB1-11		
C124		-81					TB1-10		
C125		-82					TB1-9		
C126		-83					TB1-8		
C127		-84					TB1-7		
C128		-85					TB1-6		
C129		-86					TB1-5		
C130		-87					TB1-4		
C131		-88					TB1-3		
C132		-89					TB1-2		
C133		-90					TB1-1		
C134		-91					TB1-0		
C135		-92					TB1-0		
C136		-93					TB1-0		
C137		-94					TB1-0		
C138		-95					TB1-0		
C139		-96					TB1-0		
C140		-97					TB1-0		
C141		-98					TB1-0		
C142		-99					TB1-0		
C143		-100					TB1-0		
C144		-101					TB1-0		
C145		-102					TB1-0		
C146		-103					TB1-0		
C147		-104					TB1-0		
C148		-105					TB1-0		
C149		-106					TB1-0		
C150		-107					TB1-0		
C151		-108					TB1-0		
C152		-109					TB1-0		
C153		-110					TB1-0		
C154		-111					TB1-0		
C155		-112					TB1-0		
C156		-113					TB1-0		
C157		-114					TB1-0		
C158		-115					TB1-0		
C159		-116					TB1-0		
C160		-117					TB1-0		
C161		-118					TB1-0		
C162		-119					TB1-0		
C163		-120					TB1-0		
C164		-121					TB1-0		
C165		-122					TB1-0		
C166		-123					TB1-0		
C167		-124					TB1-0		
C168		-125					TB1-0		
C169		-126					TB1-0		
C170		-127					TB1-0		
C171		-128					TB1-0		
C172		-129					TB1-0		
C173		-130					TB1-0		
C174		-131					TB1-0		
C175		-132					TB1-0		
C176		-133					TB1-0		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C177		P12-162	32	WHT	26				
C178	SEE NOTE 6	P12-163	32			AR	TB2-33		
C179		P12-164	32				TB2-32	SEE NOTE 6	
C180		J8-20	33				TB2-31		
C181	SEE NOTE 5	J8-21	33				S1-3	SEE NOTE 5	
C182		P12-165	32				TB2-30		
C183		-166					-29		
C184	SEE NOTE 6	-167					-28	SEE NOTE 6	
C185		-168					-27		
C186		-169					-26		
C187		P12-170	32				TB2-25		
C188	SEE NOTE 5	J8-22	33				S14-2	SEE NOTE 5	
C189		P12-150	32				TB2-16		
C190		-174					-24		
C191	SEE NOTE 6	-175					-23	SEE NOTE 6	
C192		P12-176	32				TB2-22		
C193	SEE NOTE 5	J8-24	33				S15-2	SEE NOTE 5	
C194		J8-25	33				S18-1		
C195		P12-186	32				TB2-12		
C196	SEE NOTE 6	-187					-14	SEE NOTE 6	
C197		-182					-7		
C198		P12-182	32				TB2-20		
C199	SEE NOTE 5	J8-26	33				S16-2	SEE NOTE 5	
C200		J8-27	33				S17-2		
C201		P12-185	32				TB2-19		
C202	SEE NOTE 6	-210					-1	SEE NOTE 6	
C203		-187					-17		
C204		-195					-13		
C205		-181	32	WHT			TB2-21		
C206	SEE NOTE 5	-193	40	ORN			S6-5	SEE NOTE 5	
C207		P12-194	32	RED			C2-4		
C208		J8-30	33	WHT			S18-2		
C209		P12-197	32	WHT			TB2-11		
C210		-209					-2		
C211		-191					-15		
C212	SEE NOTE 6	-201					-10	SEE NOTE 6	
C213		-222					-9		
C214		-203					-8		
C215		-186					-18		
C216		-207					-6		
C217		-206	32	WHT			TB2-5		
C218		P12-179	33	WHT			S19-2		
C219		S1-1	35	YEL			S2-3		
C220		S2-1					S3-3		
C221		S3-1					S4-3		
C222		S4-1					S5-3		
C223		S6-1					S6-3		
C224		S6-1					S7-3		
C225		S7-1					S8-3		
C226		S8-1					S9-3		
C227		S9-1					S10-3		
C228		S10-1					S11-3		
C229		S11-1					S12-3		
C230		S12-1					S13-3		
C231		S13-1					S14-3		
C232		S14-1					S15-3		
C233		S15-1	35	YEL			S16-3		
C234	SEE NOTE 5	S17-4	38	RED			S5-4	SEE NOTE 5	
C235		S17-5	40	ORN			S5-5		
C236		S6-4	38	RED			S2-5		
C237		S6-5	40	ORN			S2-4		
C238		S2-4	38	RED			S7-4		
C239		S2-5	40	ORN			S7-5		
C240		S7-4	38	RED			S3-4		
C241		S7-5	40	ORN			S3-5		
C242		S3-4	38	RED			S8-4		
C243		S3-5	40	ORN			S8-5		
C244		S8-4	38	RED			S9-4		
C245		S8-5	40	ORN			S9-5		
C246		S9-4	38	RED			S2-4		
C247		S9-5	40	ORN			S2-5		
C248		S12-4	38	RED			S15-4		
C249		S12-5	40	ORN			S5-5		
C250		S15-4	38	RED			S6-4		
C251		S6-5	40	ORN			S3-5		
C252		S6-4	38	RED			S6-5		
C253		S16-5	40	ORN			S3-4		
C254		S13-4	38	RED			S3-5		
C255		S13-5	40	ORN			S0-4		
C256		S10-4	38	RED			S0-5		
C257		S10-5	40	ORN			S1-4		
C258		S11-4	38	RED			S1-5		
C259		S11-5	40	ORN			S4-5		
C260		S4-4	38	RED			S7-4		
C261		S4-5	40	ORN			S7-5		
C262		S17-1	35	YEL			S18-3		
C263	SEE NOTE 6	P12-184	32	WHT			62	SEE NOTE 6	
C264	SEE NOTE 6	P12-183	41				63	SEE NOTE 5	
C265		P12-20	32				TB1-67		
C266	SEE NOTE 6	P12-8					TB1-82	SEE NOTE 6	
C267		P12-173					TB2-4		
C268		P12-177					TB2-5		
C269		P12-19	32	WHT	26	AR	TB1-54		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C1		PI2-131	32	WHT	26	A R	TB2-64		
C2		-132					TB2-63		
C3		-133					TB2-62		
C4		-134					TB2-61		
C5		-127					TB2-68		
C6		-128					TB2-67		
C7		-149					TB2-66		
C8		-130					TB2-65		
C9		-123					TB2-72		
C10		-124					TB2-71		
C11		-125					TB2-70		
C12		-126					TB2-69		
C13		-119					TB2-76		
C14		-120					TB2-75		
C15		-121					TB2-74		
C16		-122					TB2-73		
C17		-115					TB2-80		
C18		-116					TB2-79		
C19		-117					TB2-78		
C20		-118					TB2-77		
C21		-111					TB2-84		
C22		-112					TB2-83		
C23		-113					TB2-82		
C24		-114					TB2-81		
C25		-107					TB2-88		
C26		-108					TB2-87		
C27		-109					TB2-86		
C28		-110					TB2-85		
C29		-103					TB2-92		
C30		-104					TB2-91		
C31		-105					TB2-90		
C32		-106					TB2-89		
C33		-99					TB2-96		
C34		-102					TB2-95		
C35		-101					TB2-94		
C36		-102					TB2-93		
C37		-95					TB2-100		
C38		-96					TB2-99		
C39		-97					TB2-98		
C40		-98					TB2-97		
C41		-91					TB1-1		
C42		-92					TB2-103		
C43		-94					TB2-102		
C44		-87					TB1-101		
C45		-88					TB1-4		
C46		-89					TB1-3		
C47		-90					TB1-2		
C48		-83					TB1-9		
C49		-84					TB1-8		
C50		-85					TB1-7		
C51		-86					TB1-6		
C52		-79					TB1-13		
C53		-80					TB1-12		
C54		-81					TB1-11		
C55		-82					TB1-10		
C56		-73					TB1-19		
C57		-74					TB1-18		
C58		-75					TB1-17		
C59		-76					TB1-16		
C60		-77					TB1-15		
C61		-78					TB1-14		
C62		-67					TB1-25		
C63		-68					TB1-24		
C64		-69					TB1-23		
C65		-70					TB1-22		
C66		-71					TB1-21		
C67		-72					TB1-20		
C68		-61					TB1-31		
C69		-63					TB1-30		
C70		-64					TB1-28		
C71		-65					TB1-27		
C72		-66					TB1-26		
C73		-55					TB1-35		
C74		-56					TB1-37		
C75		-57					TB1-36		
C76		-58					TB1-34		
C77		-59					TB1-33		
C78		-60					TB1-32		
C79		-50					TB1-42		
C80		-51					TB1-41		
C81		-52					TB1-40		
C82		-53					TB1-39		
C83		-54					TB1-38		
C84		-43					TB1-48		
C85		-44					TB1-47		
C86		-45					TB1-46		
C87		-46					TB1-45		
C88		PI2-45	32	WHT	26	A R	TB1-46		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C89		PI2-46	32	WHT	26	A R	TB1-45		
C90		-47					TB1-44		
C91		-48					TB1-43		
C92		-37					TB1-54		
C93		-38					TB1-53		
C94		-33					TB1-52		
C95		-40					TB1-51		
C96		-41					TB1-50		
C97		-42					TB1-49		
C98		-31					TB1-60		
C99		-32					TB1-59		
C100		-33					TB1-58		
C101		-34					TB1-57		
C102		-35					TB1-56		
C103		-36					TB1-55		
C104		-25					TB1-63		
C105		-27					TB1-64		
C106		-28					TB1-65		
C107		-29					TB1-66		
C108		-30					TB1-67		
C109		-21					TB1-71		
C110		-22					TB1-70		
C111		-23					TB1-69		
C112		-24					TB1-68		
C113		-13					TB1-76		
C114		-15					TB1-75		
C115		-16					TB1-74		
C116		-17					TB1-73		
C117		-18					TB1-72		
C118		-7					TB1-81		
C119		-9					TB1-80		
C120		-10					TB1-79		
C121		-11					TB1-78		
C122		-12					TB1-77		
C123		-1					TB1-87		
C124		-3					TB1-86		
C125		-4					TB1-85		
C126		-5					TB1-84		
C127		PI2-6	32	WHT			TB1-83		
C128		S16-1	35	YEL			S17-3		
C129		S5-4	40	RED			S19-4		
C130		S5-5	40	ORN			S19-5		
C131		S19-4	38	RED			S1-4		
C132		S19-5	40	ORN			S1-5		
C133		S1-4	38	RED			S18-4		
C134		S1-5	40	ORN			S18-5		
C135		S18-4	38	RED			S4-4		
C136		S18-5	40	ORN			S4-5		
C137		S2-2	35	WHT			S2-2		
C138		S2-3	35	WHT			S1-2		
C139		S3-2	35	WHT			S3-2		
C140		S19-4	38	RED			S19-4		
C141		S19-5	40	ORN			S4-2		
C142		S10-2	35	WHT			S10-2		
C143		S5-2	35	WHT			S5-2		
C144		PI2-135	32	WHT			TB2-60		
C145		-136					TB2-59		
C146		-137					TB2-58		
C147		-138					TB2-57		
C148		-139					TB2-56		
C149		PI2-140	32	WHT			TB2-55		
C150		J8-14	33				S12-2		
C151		J8-15	33				S6-2		
C152		PI2-141	32	WHT			TB2-54		
C153		-142					TB2-53		
C154		-143					TB2-52		
C155		-144					TB2-51		
C156		-145					TB2-50		
C157		PI2-146	32	WHT			TB2-49		
C158		J8-16	33				S7-2		
C159		J8-17	33				S9-2		
C160		PI2-147	32	WHT			TB2-48		
C161		-148					TB2-47		
C162		-149					TB2-46		
C163		-150					TB2-45		
C164		-151					TB2-44		
C165		-152					TB2-43		
C166		-153					TB2-42		
C167		-154					TB2-41		
C168		-155					TB2-40		
C169		-156					TB2-39		
C170		-157					TB2-38		
C171		PI2-158	32	WHT			TB2-37		
C172		J8-18	33				S11-2		
C173		J8-19	33				S8-2		
C174		PI2-159	32	WHT			TB2-36		
C175		PI2-160	32	WHT			TB2-35		
C176		PI2-161	32	WHT			TB2-34		

LEAD ELECTRICAL									
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS	
C177		P12-162	32	WHT	26	AR	TB2-33		
C178	SEE NOTE 6	P12-163	32				TB2-32		SEE NOTE 6
C179		P12-164	32				S13-2		
C180	SEE NOTE 5	J8-20	33				S13-3		SEE NOTE 5
C181			33				TB2-30		
C182		P12-165	32				TB2-29		
C183		-166					TB2-28		
C184		-167					TB2-27		
C185	SEE NOTE 6	-168					TB2-26		SEE NOTE 6
C186		-169					TB2-25		
C187		P12-170	32				TB2-24		
C188	SEE NOTE 5	J8-22	33				S14-2		SEE NOTE 5
C189		P12-190	32				TB2-16		
C190		-174					TB2-15		
C191	SEE NOTE 6	-175					TB2-14		SEE NOTE 6
C192		P12-176	32				TB2-22		
C193	SEE NOTE 5	J8-24	33				S15-2		SEE NOTE 5
C194		J8-25	33				S18-1		
C195		P12-196	32				TB2-12		
C196	SEE NOTE 6	-192					TB2-11		SEE NOTE 6
C197		-204					TB2-10		
C198		P12-182	32				TB2-20		
C199	SEE NOTE 5	J8-26	33				S16-2		SEE NOTE 5
C200		J8-27	33				S17-2		
C201		P12-183	32				TB2-19		
C202		-210					TB2-18		
C203	SEE NOTE 6	-187					TB2-17		SEE NOTE 6
C204		-195					TB2-16		
C205		-181	32	WHT			TB2-21		
C206		-193	40	ORN			S16-5		
C207	SEE NOTE 8	P12-194	38	RED			S16-4		SEE NOTE 8
C208		-213	33	WHT			S18-2		
C209		P12-187	32	WHT			TB2-11		
C210		-219					TB2-10		
C211		-191					TB2-9		
C212		-201					TB2-8		
C213	SEE NOTE 6	-202					TB2-7		SEE NOTE 6
C214		-203					TB2-6		
C215		-186					TB2-5		
C216		-207					TB2-4		
C217		-208	32	WHT			TB2-3		
C218		P12-179	33	WHT			S19-2		
C219		S11-1	35	YEL			S23-3		
C220		S2-1					S23-3		
C221		S3-1					S4-3		
C222		S4-1					S5-3		
C223		S6-1					S6-3		
C224		S6-1					S7-3		
C225		S7-1					S8-3		
C226		S8-1					S9-3		
C227		S9-1					S10-3		
C228		S10-1					S11-3		
C229		S11-1					S12-3		
C230		S12-1					S13-3		
C231		S13-1					S14-3		
C232		S14-1					S15-3		
C233		S15-1	35	YEL			S16-3		
C234	SEE NOTE 8	S17-4	38	RED			S24-4		SEE NOTE 8
C235		S17-5	40	ORN			S25-5		
C236		S6-4	38	RED			S2-4		
C237		S6-5	40	ORN			S2-5		
C238		S2-4	38	RED			S7-4		
C239		S2-5	40	ORN			S7-5		
C240		S7-4	38	RED			S3-4		SEE NOTE 5
C241		S7-5	40	ORN			S3-5		
C242		S3-4	38	RED			S8-4		
C243		S3-5	40	ORN			S8-5		
C244		S8-4	38	RED			S9-4		
C245		S8-5	40	ORN			S9-5		
C246		S9-4	38	RED			S2-4		
C247		S9-5	40	ORN			S2-5		
C248		S2-4	38	RED			S15-4		
C249		S2-5	40	ORN			S15-5		
C250		S15-4	38	RED			S6-4		
C251		S15-5	40	ORN			S6-5		
C252		S6-4	38	RED			S3-4		
C253		S6-5	40	ORN			S3-5		
C254		S13-4	38	RED			S0-4		
C255		S13-5	40	ORN			S0-5		
C256		S10-4	38	RED			S1-4		
C257		S10-5	40	ORN			S1-5		
C258		S11-4	38	RED			S14-4		
C259		S11-5	40	ORN			S14-5		
C260		S14-4	38	RED			S17-4		
C261		S14-5	40	ORN			S17-5		
C262		S17-1	35	YEL			S18-3		
C263	SEE NOTE 6	P12-184	32	WHT			TB1-67		SEE NOTE 6
C264	SEE NOTE 6	P12-183	41				TB1-82		SEE NOTE 6
C265		P12-20	32				TB2-4		
C266	SEE NOTE 6	P12-173	32				TB2-3		SEE NOTE 6
C267		P12-177					TB2-2		
C268		P12-179	32	WHT	26	AR	TB1-66		

2003949 E

REVISIONS				
REV	DATE	DESCRIPTION	BY	APP
A		REVISED PER TORR 26856	JPT	2/2/78
B		REVISED PER TORR 27913	JPT	2/2/78
C		REVISED PER TORR 28178	JPT	2/2/78
D		REVISED PER TORR 29705	JPT	2/2/78
E		REVISED PER TORR 32580	JPT	2/2/78

LEAD ELECTRICAL					
FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO
P12-131	32	WHT	26	AR	TB2-64
-132					TB2-63
-133					TB2-62
-134					TB2-61
-135					TB2-60
-136					TB2-59
-137					TB2-58
-138					TB2-57
-139					TB2-56
-140					TB2-55
-141					TB2-54
-142					TB2-53
-143					TB2-52
-144					TB2-51
-145					TB2-50
-146					TB2-49
-147					TB2-48
-148					TB2-47
-149					TB2-46
-150					TB2-45
-151					TB2-44
-152					TB2-43
-153					TB2-42
-154					TB2-41
-155					TB2-40
-156					TB2-39
-157					TB2-38
-158					TB2-37
-159					TB2-36
-160					TB2-35
-161					TB2-34
-162					TB2-33
-163					TB2-32
-164					TB2-31
-165					TB2-30
-166					TB2-29
-167					TB2-28
-168					TB2-27
-169					TB2-26
-170					TB2-25
-171					TB2-24
-172					TB2-23
-173					TB2-22
-174					TB2-21
-175					TB2-20
-176					TB2-19
-177					TB2-18
-178					TB2-17
-179					TB2-16
-180					TB2-15
-181					TB2-14
-182					TB2-13
-183					TB2-12
-184					TB2-11
-185					TB2-10
-186					TB2-9
-187					TB2-8
-188					TB2-7
-189					TB2-6
-190					TB2-5
-191					TB2-4
-192					TB2-3
-193					TB2-2
-194					TB2-1
-195					TB2-0
-196					TB2-0
-197					TB2-0
-198					TB2-0
-199					TB2-0
-200					TB2-0
-201					TB2-0
-202					TB2-0
-203					TB2-0
-204					TB2-0
-205					TB2-0
-206					TB2-0
-207					TB2-0
-208					TB2-0
-209					TB2-0
-210					TB2-0
-211					TB2-0
-212					TB2-0
-213					TB2-0
-214					TB2-0
-215					TB2-0
-216					TB2-0
-217					TB2-0
-218					TB2-0
-219					TB2-0
-220					TB2-0
-221					TB2-0
-222					TB2-0
-223					TB2-0
-224					TB2-0
-225					TB2-0
-226					TB2-0
-227					TB2-0
-228					TB2-0
-229					TB2-0
-230					TB2-0
-231					TB2-0
-232					TB2-0
-233					TB2-0
-234					TB2-0
-235					TB2-0
-236					TB2-0
-237					TB2-0
-238					TB2-0
-239					TB2-0
-240					TB2-0
-241					TB2-0
-242					TB2-0
-243					TB2-0
-244					TB2-0
-245					TB2-0
-246					TB2-0
-247					TB2-0
-248					TB2-0
-249					TB2-0
-250					TB2-0
-251					TB2-0
-252					TB2-0
-253					TB2-0
-254					TB2-0
-255					TB2-0
-256					TB2-0
-257					TB2-0
-258					TB2-0
-259					TB2-0
-260					TB2-0
-261					TB2-0
-262					TB2-0
-263					TB2-0
-264					TB2-0
-265					TB2-0
-266					TB2-0
-267					TB2-0
-268					TB2-0
-269					TB2-0

LEAD ELECTRICAL					
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG
C89		P12-46	32	WHT	26
C90		-47			
C91		-48			
C92		-37			
C93		-38			
C94		-39			
C95		-40			
C96		-41			
C97		-42			
C98		-31			
C99		-32			
C100		-34			
C101		-35			
C102		-36			
C103		-25			
C104		-27			
C105		-28			
C106	SEE NOTE 6	-29			
C107		-30			
C108		-21			
C109		-22			
C110		-23			
C111		-24			
C112		-13			
C113		-15			
C114		-16			
C115		-17			
C116		-18			
C117		-7			
C118		-9			
C119		-10			
C120		-11			
C121		-12			
C122		-1			
C123		-3			
C124		-4			
C125		-5			
C126		-6			
C127		P12-6	32	WHT	26
C128		S16-1	35	YEL	
C129		S5-4	38	RED	
C130		S5-5	40	ORN	
C131		S19-4	38	RED	
C132		S19-5	40	ORN	
C133		S1-4	38	RED	
C134		S1-5	40	ORN	
C135		S18-4	38	RED	
C136		S18-5	40	ORN	
C137		J8-3	33	WHT	
C138		-5			
C139		-8			
C140		-9			
C141		-10			
C142		-11			
C143		J8-13	33		
C144		P12-135	32		
C145		-136			
C146		-137			
C147		-138			
C148		-139			
C149		P12-140	32		
C150		J8-14	33		
C151		J8-15	33		
C152		P12-141	32		
C153		-142			
C154		-143			
C155		-144			
C156		-145			
C157		P12-146	32		
C158		J8-16	33		
C159		J8-17	33		
C160		P12-147	32		
C161		-148			
C162		-149			
C163		-150			
C164		-151			
C165		-152			
C166		-153			
C167		-154			
C168		-155			
C169		-156			
C170		-157			
C171		P12-158	32		
C172		J8-18	33		
C173		J8-19	33		
C174		P12-159	32		
C175		P12-160	32		
C176		P12-161	32		

LEAD ELECTRICAL					
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG
C177		P12-162	32	WHT	26
C178	SEE NOTE 6	P12-163	32		
C179		P12-164	32		
C180	SEE NOTE 5	J8-20	33		
C181		J8-21	33		
C182		P12-165	32		
C183		-166			
C184	SEE NOTE 6	-167			
C185		-168			
C186		-169			
C187		P12-170	32		
C188	SEE NOTE 5	J8-22	33		
C189		P12-190	32		
C190	SEE NOTE 6	-174			
C191		-175			
C192		P12-176	32		
C193	SEE NOTE 5	J8-24	33		
C194		J8-25	33		
C195		P12-196	32		
C196	SEE NOTE 6	-192			
C197		-204			
C198		P12-182	32		
C199	SEE NOTE 5	J8-26	33		
C200		J8-27	33		
C201		P12-185	32		
C202		-210			
C203	SEE NOTE 6	-187			
C204		-195			
C205		-181	32	WHT	
C206	SEE NOTE 5	-193	40	ORN	
C207		P12-194	38	RED	
C208		J8-28	33	WHT	
C209		P12-197	32	WHT	
C210		-209			
C211		-191			
C212		-201			
C213	SEE NOTE 6	-202			
C214		-203			
C215		-186			
C216		-207			
C217		-208	32	WHT	
C218		P12-179	33	WHT	
C219		S1-1	35	YEL	
C220		S2-1			
C221		S3-1			
C222		S4-1			
C223		S5-1			
C224		S6-1			
C225		S7-1			
C226		S8-1			
C227		S9-1			
C228		S10-1			
C229		S11-1			
C230		S12-1			
C231		S13-1			
C232		S14-1			
C233		S15-1	35	YEL	
C234	SEE NOTE 5	S17-4	38	RED	
C235		S17-5	40	ORN	
C236		S6-4	38	RED	
C237		S6-5	40	ORN	
C238		S2-4	38	RED	
C239		S2-5	40	ORN	
C240		S7-4	38	RED	
C241		S7-5	40	ORN	
C242		S3-4	38	RED	
C243		S3-5	40	ORN	
C244		S8-4	38	RED	
C245		S8-5	40	ORN	
C246		S9-4	38	RED	
C247		S9-5	40	ORN	
C248		S12-4	38	RED	
C249		S12-5	40	ORN	
C250		S15-4	38	RED	
C251		S15-5	40	ORN	
C252		S16-4	38	RED	
C253		S16-5	40	ORN	

2003949 G

A	REVISED PER TDRR 26856
B	REVISED PER TDRR 27913
C	REVISED PER TDRR 28178
D	REVISED PER TDRR 29705
E	REVISED PER TDRR 32580
F	REVISED PER TDRR 33940
G	REVISED PER TDRR 34492

COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
C89		P12-46	32	WHT	26	AR	TB2-64	
C90		TB2-63					TB2-62	
C91		TB2-61					TB2-60	
C92		TB2-60					TB2-59	
C93		TB2-59					TB2-58	
C94		TB2-58					TB2-57	
C95		TB2-57					TB2-56	
C96		TB2-56					TB2-55	
C97		TB2-55					TB2-54	
C98		TB2-54					TB2-53	
C99		TB2-53					TB2-52	
C100		TB2-52					TB2-51	
C101		TB2-51					TB2-50	
C102		TB2-50					TB2-49	
C103		TB2-49					TB2-48	
C104		TB2-48					TB2-47	
C105		TB2-47					TB2-46	
C106		TB2-46					TB2-45	
C107		TB2-45					TB2-44	
C108		TB2-44					TB2-43	
C109		TB2-43					TB2-42	
C110		TB2-42					TB2-41	
C111		TB2-41					TB2-40	
C112		TB2-40					TB2-39	
C113		TB2-39					TB2-38	
C114		TB2-38					TB2-37	
C115		TB2-37					TB2-36	
C116		TB2-36					TB2-35	
C117		TB2-35					TB2-34	
C118		TB2-34					TB2-33	
C119		TB2-33					TB2-32	
C120		TB2-32					TB2-31	
C121		TB2-31					TB2-30	
C122		TB2-30					TB2-29	
C123		TB2-29					TB2-28	
C124		TB2-28					TB2-27	
C125		TB2-27					TB2-26	
C126		TB2-26					TB2-25	
C127		TB2-25					TB2-24	
C128		TB2-24					TB2-23	
C129		TB2-23					TB2-22	
C130		TB2-22					TB2-21	
C131		TB2-21					TB2-20	
C132		TB2-20					TB2-19	
C133		TB2-19					TB2-18	
C134		TB2-18					TB2-17	
C135		TB2-17					TB2-16	
C136		TB2-16					TB2-15	
C137		TB2-15					TB2-14	
C138		TB2-14					TB2-13	
C139		TB2-13					TB2-12	
C140		TB2-12					TB2-11	
C141		TB2-11					TB2-10	
C142		TB2-10					TB2-9	
C143		TB2-9					TB2-8	
C144		TB2-8					TB2-7	
C145		TB2-7					TB2-6	
C146		TB2-6					TB2-5	
C147		TB2-5					TB2-4	
C148		TB2-4					TB2-3	
C149		TB2-3					TB2-2	
C150		TB2-2					TB2-1	
C151		TB2-1					TB2-0	
C152		TB2-0					TB2-64	
C153		TB2-64					TB2-63	
C154		TB2-63					TB2-62	
C155		TB2-62					TB2-61	
C156		TB2-61					TB2-60	
C157		TB2-60					TB2-59	
C158		TB2-59					TB2-58	
C159		TB2-58					TB2-57	
C160		TB2-57					TB2-56	
C161		TB2-56					TB2-55	
C162		TB2-55					TB2-54	
C163		TB2-54					TB2-53	
C164		TB2-53					TB2-52	
C165		TB2-52					TB2-51	
C166		TB2-51					TB2-50	
C167		TB2-50					TB2-49	
C168		TB2-49					TB2-48	
C169		TB2-48					TB2-47	
C170		TB2-47					TB2-46	
C171		TB2-46					TB2-45	
C172		TB2-45					TB2-44	
C173		TB2-44					TB2-43	
C174		TB2-43					TB2-42	
C175		TB2-42					TB2-41	
C176		TB2-41					TB2-40	
C177		TB2-40					TB2-39	
C178		TB2-39					TB2-38	
C179		TB2-38					TB2-37	
C180		TB2-37					TB2-36	
C181		TB2-36					TB2-35	
C182		TB2-35					TB2-34	
C183		TB2-34					TB2-33	
C184		TB2-33					TB2-32	
C185		TB2-32					TB2-31	
C186		TB2-31					TB2-30	
C187		TB2-30					TB2-29	
C188		TB2-29					TB2-28	
C189		TB2-28					TB2-27	
C190		TB2-27					TB2-26	
C191		TB2-26					TB2-25	
C192		TB2-25					TB2-24	
C193		TB2-24					TB2-23	
C194		TB2-23					TB2-22	
C195		TB2-22					TB2-21	
C196		TB2-21					TB2-20	
C197		TB2-20					TB2-19	
C198		TB2-19					TB2-18	
C199		TB2-18					TB2-17	
C200		TB2-17					TB2-16	
C201		TB2-16					TB2-15	
C202		TB2-15					TB2-14	
C203		TB2-14					TB2-13	
C204		TB2-13					TB2-12	
C205		TB2-12					TB2-11	
C206		TB2-11					TB2-10	
C207		TB2-10					TB2-9	
C208		TB2-9					TB2-8	
C209		TB2-8					TB2-7	
C210		TB2-7					TB2-6	
C211		TB2-6					TB2-5	
C212		TB2-5					TB2-4	
C213		TB2-4					TB2-3	
C214		TB2-3					TB2-2	
C215		TB2-2					TB2-1	
C216		TB2-1					TB2-64	
C217		TB2-64					TB2-63	
C218		TB2-63					TB2-62	
C219		TB2-62					TB2-61	
C220		TB2-61					TB2-60	
C221		TB2-60					TB2-59	
C222		TB2-59					TB2-58	
C223		TB2-58					TB2-57	
C224		TB2-57					TB2-56	
C225		TB2-56					TB2-55	
C226		TB2-55					TB2-54	
C227		TB2-54					TB2-53	
C228		TB2-53					TB2-52	
C229		TB2-52					TB2-51	
C230		TB2-51					TB2-50	
C231		TB2-50					TB2-49	
C232		TB2-49					TB2-48	
C233		TB2-48					TB2-47	
C234		TB2-47					TB2-46	
C235		TB2-46					TB2-45	
C236		TB2-45					TB2-44	
C237		TB2-44					TB2-43	
C238		TB2-43					TB2-42	
C239		TB2-42					TB2-41	
C240		TB2-41					TB2-40	
C241		TB2-40					TB2-39	
C242		TB2-39					TB2-38	
C243		TB2-38					TB2-37	
C244		TB2-37					TB2-36	
C245		TB2-36					TB2-35	
C246		TB2-35					TB2-34	
C247		TB2-34					TB2-33	
C248		TB2-33					TB2-32	
C249		TB2-32					TB2-31	
C250		TB2-31					TB2-30	
C251		TB2-30					TB2-29	
C252		TB2-29					TB2-28	
C253		TB2-28					TB2-27	
C254		TB2-27					TB2-26	
C255		TB2-26					TB2-25	
C256		TB2-25					TB2-24	
C257		TB2-24					TB2-23	
C258		TB2-23					TB2-22	
C259		TB2-22					TB2-21	
C260		TB2-21					TB2-20	
C261		TB2-20					TB2-19	
C262		TB2-19					TB2-18	
C263		TB2-18					TB2-17	
C264		TB2-17					TB2-16	
C265		TB2-16					TB2-15	
C266		TB2-15					TB2-14	
C267		TB2-14					TB2-13	
C268		TB2-13					TB2-12	
C269		TB2-12					TB2-11	

LEAD ELECTRICAL								
COND IDENT	REMARKS	FROM	FIND NO.	COLOR	SIZE AWG	LENGTH	TO	REMARKS
C89	SEE NOTE 6	P12-46	32	WHT	26	AR	TB1-45	SEE NOTE 6
C90		↑ -47	↑	↑	↑	↑	TB1-44	
C91		↑ -48	↑	↑	↑	↑	TB1-43	
C92		↑ -47	↑	↑	↑	↑	TB1-42	
C93		↑ -38	↑	↑	↑	↑	TB1-53	
C94		↑ -39	↑	↑	↑	↑	TB1-52	
C95		↑ -40	↑	↑	↑	↑	TB1-51	
C96		↑ -41	↑	↑	↑	↑	TB1-50	
C97		↑ -42	↑	↑	↑	↑	TB1-49	
C98		↑ -31	↑	↑	↑	↑	TB1-60	
C99		↑ -32	↑	↑	↑	↑	TB1-59	
C100		↑ -33	↑	↑	↑	↑	TB1-58	
C101		↑ -34	↑	↑	↑	↑	TB1-57	
C102		↑ -35	↑	↑	↑	↑	TB1-56	
C103		↑ -36	↑	↑	↑	↑	TB1-57	
C104		↑ -25	↑	↑	↑	↑	TB1-65	
C105		↑ -27	↑	↑	↑	↑	TB1-64	
C106		↑ -28	↑	↑	↑	↑	TB1-63	
C107		↑ -29	↑	↑	↑	↑	TB1-62	
C108		↑ -30	↑	↑	↑	↑	TB1-61	
C109		↑ -21	↑	↑	↑	↑	TB1-71	
C110		↑ -22	↑	↑	↑	↑	TB1-70	
C111		↑ -23	↑	↑	↑	↑	TB1-69	
C112		↑ -24	↑	↑	↑	↑	TB1-68	
C113	↑ -13	↑	↑	↑	↑	TB1-76		
C114	↑ -15	↑	↑	↑	↑	TB1-75		
C115	↑ -16	↑	↑	↑	↑	TB1-74		
C116	↑ -17	↑	↑	↑	↑	TB1-73		
C117	↑ -18	↑	↑	↑	↑	TB1-72		
C118	↑ -7	↑	↑	↑	↑	TB1-81		
C119	↑ -9	↑	↑	↑	↑	TB1-80		
C120	↑ -10	↑	↑	↑	↑	TB1-79		
C121	↑ -11	↑	↑	↑	↑	TB1-78		
C122	↑ -12	↑	↑	↑	↑	TB1-77		
C123	↑ -1	↑	↑	↑	↑	TB1-87		
C124	↑ -3	↑	↑	↑	↑	TB1-86		
C125	↑ -4	↑	↑	↑	↑	TB1-85		
C126	↑ -5	↑	↑	↑	↑	TB1-84		
C127	P12-6	32	WHT				TB1-83	
C128	S16-1	35	YEL				S17-3	
C129	S5-4	38	RED				S19-4	
C130	S5-5	40	ORN				S19-5	
C131	S19-4	38	RED				S1-4	
C132	S19-5	40	ORN				S1-5	
C133	S1-4	38	RED				S18-4	
C134	S1-5	40	ORN				S18-5	
C135	S18-4	38	RED				S4-4	
C136	S18-5	40	ORN				S4-5	
C137	J8-3	33	WHT				S2-2	
C138	↑ -5	↑	↑	↑	↑	↑	S1-2	
C139	↑ -8	↑	↑	↑	↑	↑	S3-2	
C140	↑ -9	↑	↑	↑	↑	↑	S19-3	
C141	↑ -10	↑	↑	↑	↑	↑	S4-2	
C142	↑ -11	↑	↑	↑	↑	↑	S10-2	
C143	J8-13	33					S5-2	
C144	P12-135	32					TB2-60	
C145	↑ -136	↑	↑	↑	↑	↑	TB2-59	
C146	↑ -137	↑	↑	↑	↑	↑	TB2-58	
C147	↑ -138	↑	↑	↑	↑	↑	TB2-57	
C148	↑ -139	↑	↑	↑	↑	↑	TB2-56	
C149	P12-140	32					TB2-55	
C150	J8-14	33					S12-2	
C151	J8-15	33					S6-2	
C152	P12-141	32					TB2-54	
C153	↑ -142	↑	↑	↑	↑	↑	TB2-53	
C154	↑ -143	↑	↑	↑	↑	↑	TB2-52	
C155	↑ -144	↑	↑	↑	↑	↑	TB2-51	
C156	↑ -145	↑	↑	↑	↑	↑	TB2-50	
C157	P12-146	32					TB2-49	
C158	J8-16	33					S7-2	
C159	P12-147	32					S9-2	
C160	↑ -148	↑	↑	↑	↑	↑	TB2-48	
C161	↑ -149	↑	↑	↑	↑	↑	TB2-47	
C162	↑ -149	↑	↑	↑	↑	↑	TB2-46	
C163	↑ -150	↑	↑	↑	↑	↑	TB2-45	
C164	↑ -151	↑	↑	↑	↑	↑	TB2-44	
C165	↑ -152	↑	↑	↑	↑	↑	TB2-43	
C166	↑ -153	↑	↑	↑	↑	↑	TB2-42	
C167	↑ -154	↑	↑	↑	↑	↑	TB2-41	
C168	↑ -155	↑	↑	↑	↑	↑	TB2-40	
C169	↑ -156	↑	↑	↑	↑	↑	TB2-39	
C170	↑ -157	↑	↑	↑	↑	↑	TB2-38	
C171	P12-158	32					TB2-37	
C172	J8-18	33					S11-2	
C173	J8-19	33					S8-2	
C174	P12-159	32					TB2-36	
C175	P12-160	32					TB2-35	
C176	P12-161	32	WHT	26	AP		TB2-34	

2003956

2003956

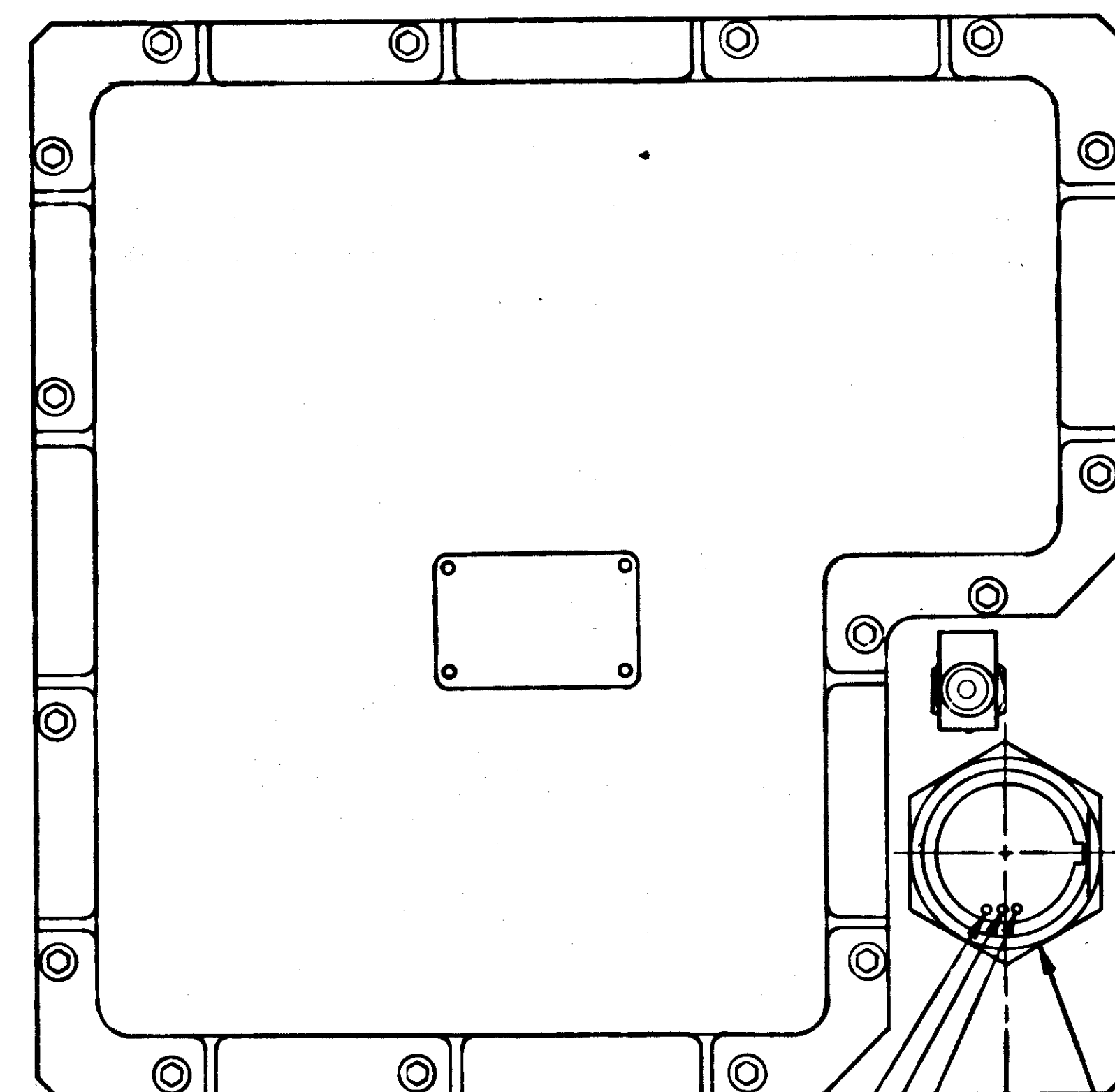
REVISION
DATE

D

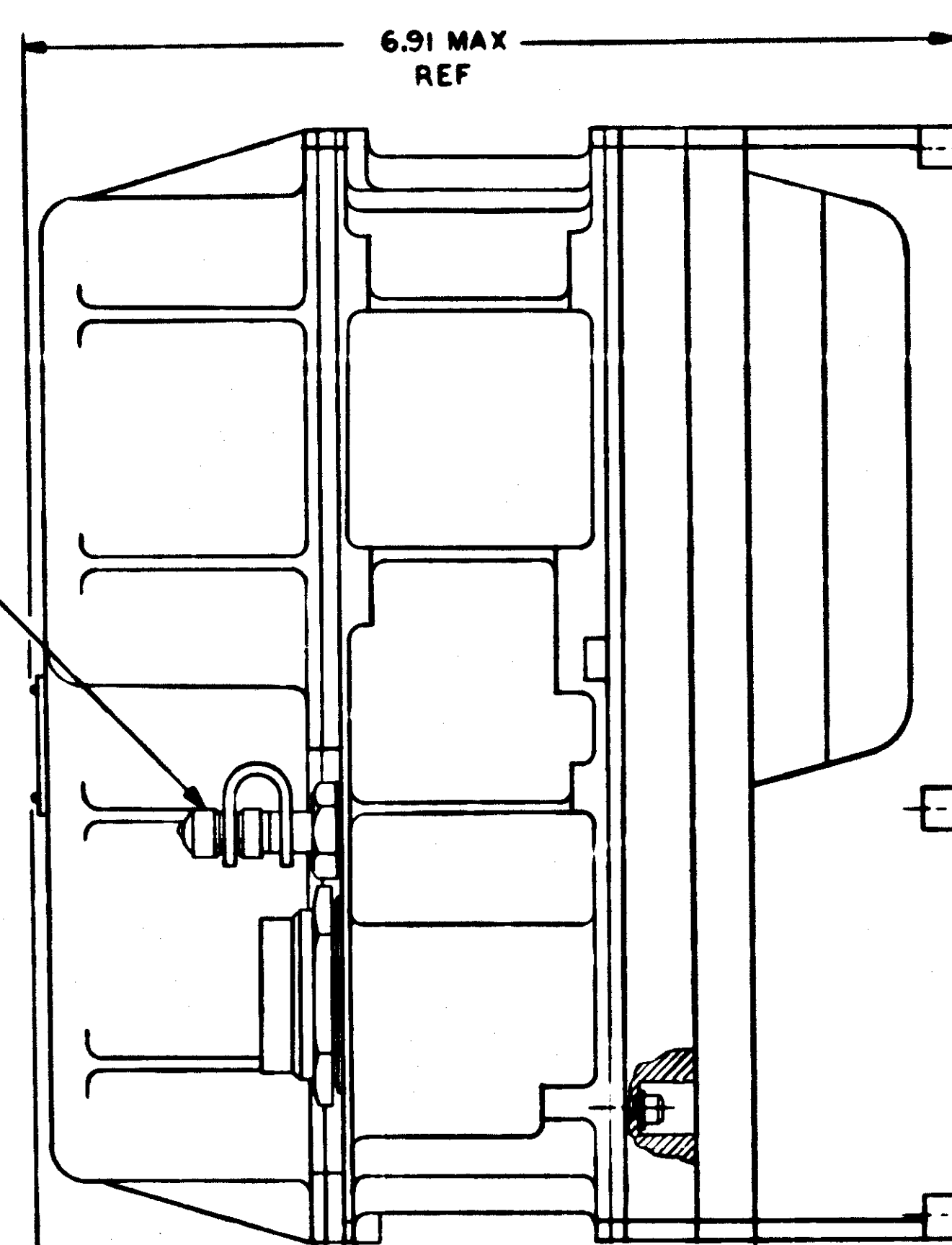
C

B

A

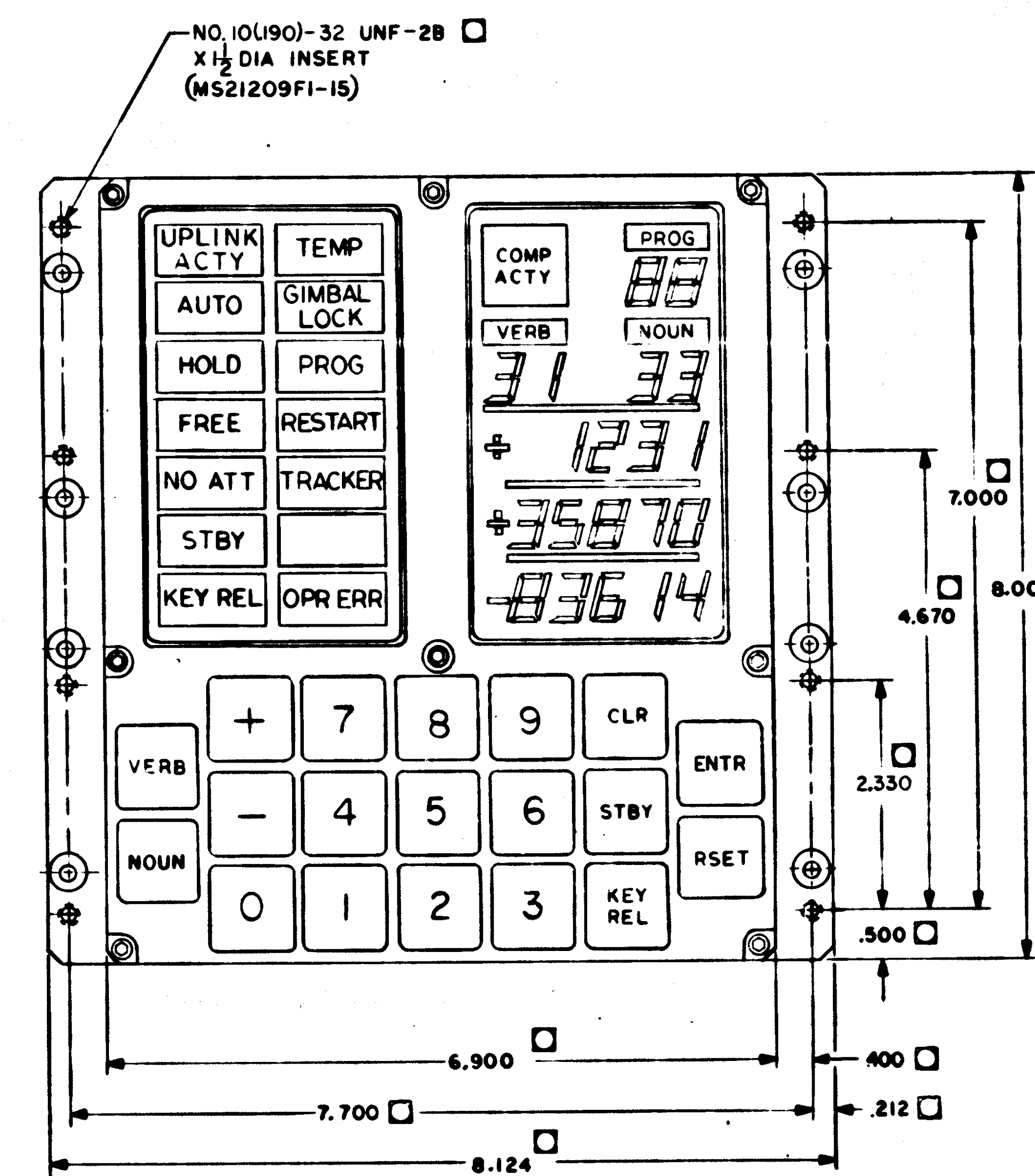
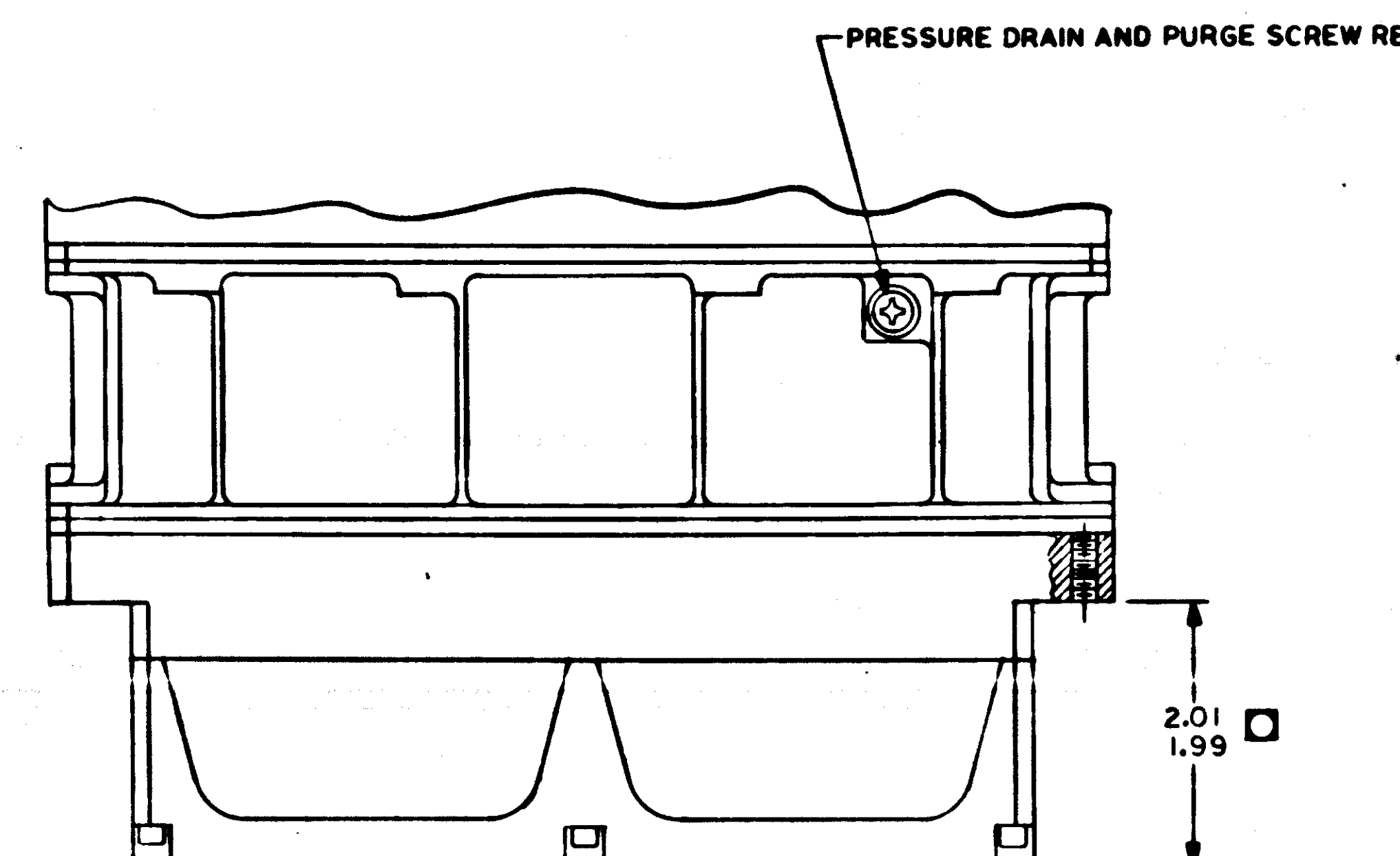


FILLER VALVE REF



PIN 83 REF
PIN 84 REF
PIN 85 REF
CONNECTOR, RECEPTACLE, ELECTRICAL
PER 1006361-003
85 PIN CONTACTS
MATES WITH 1010929-003
(85 SOCKET CONTACTS PER 1010770-2)

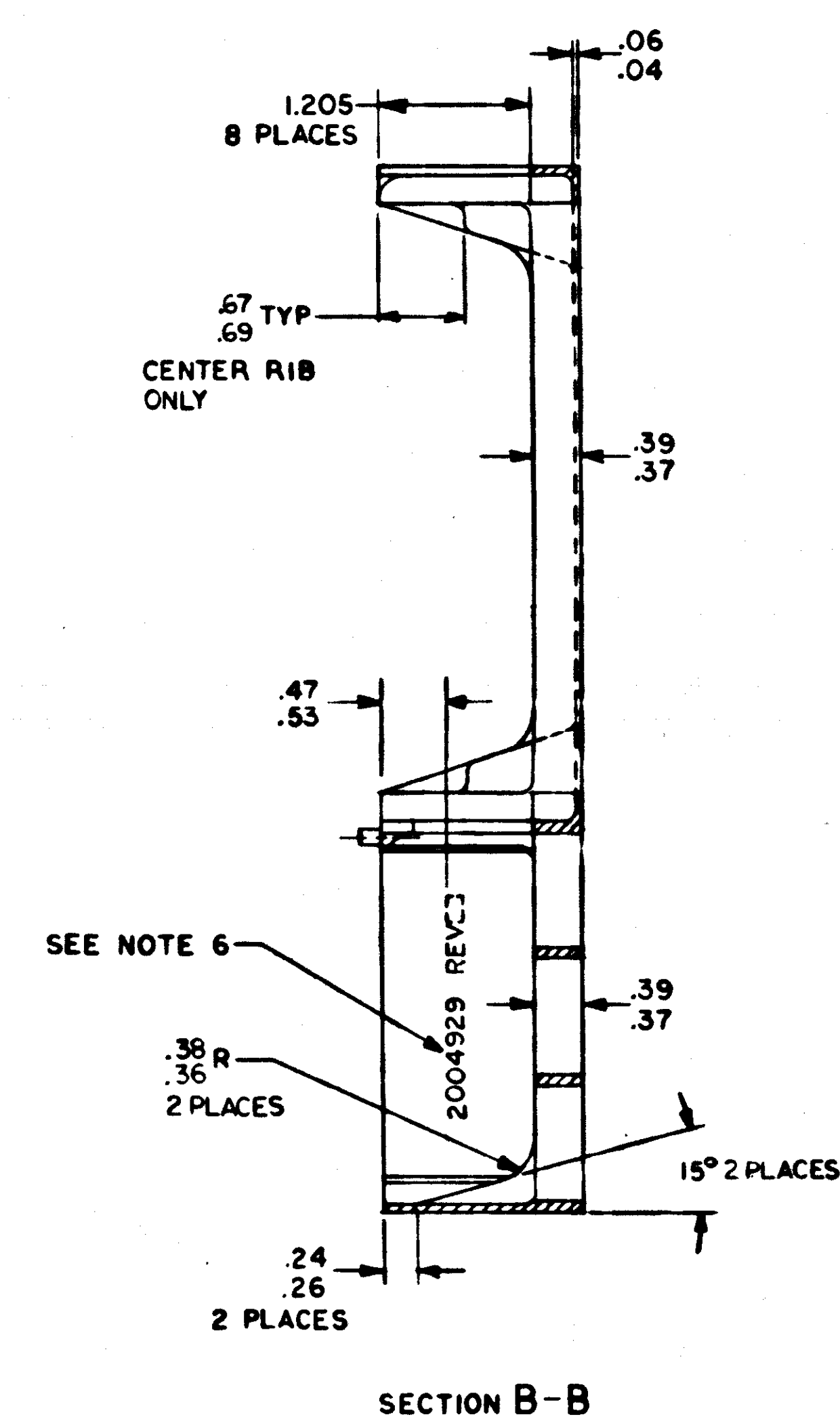
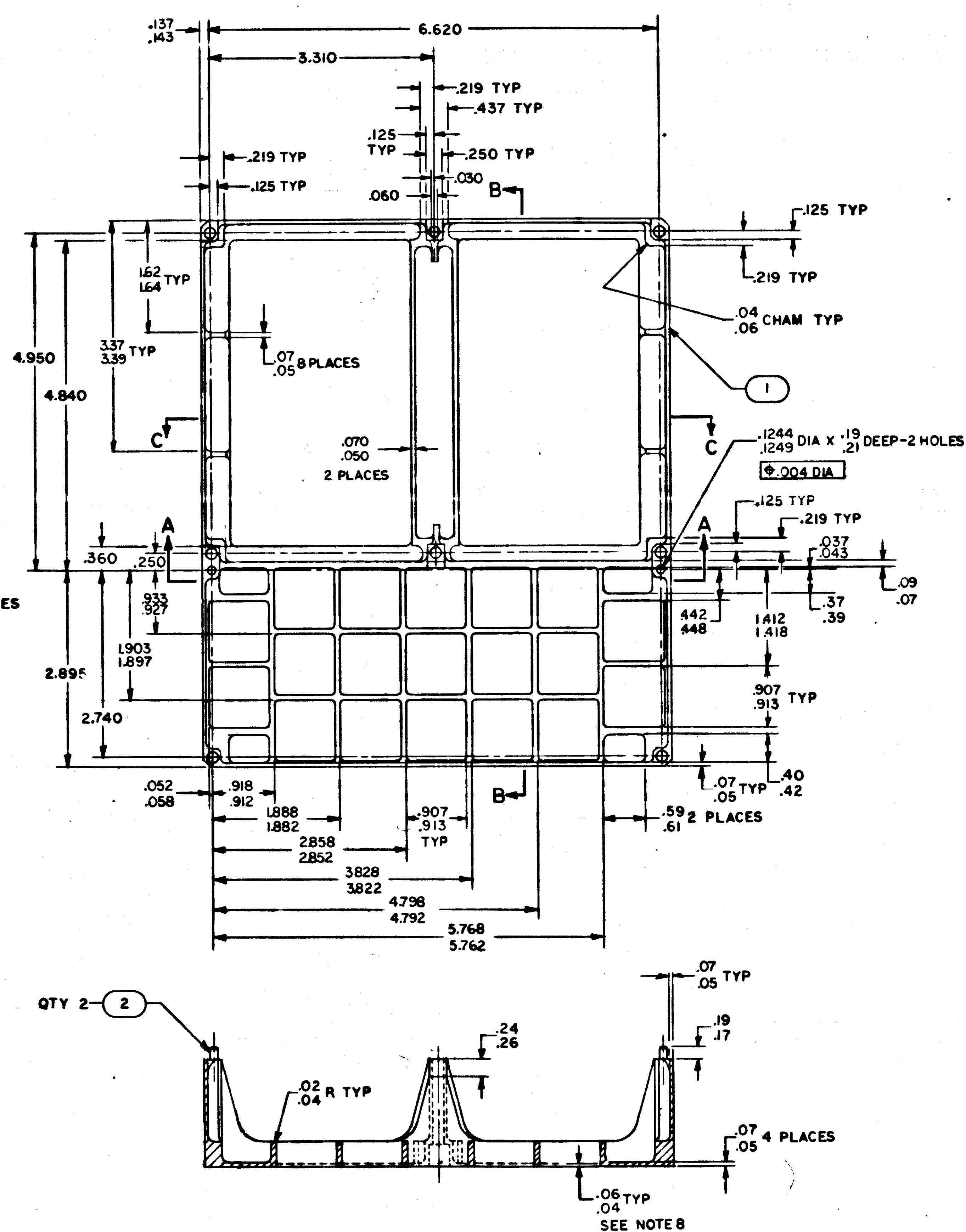
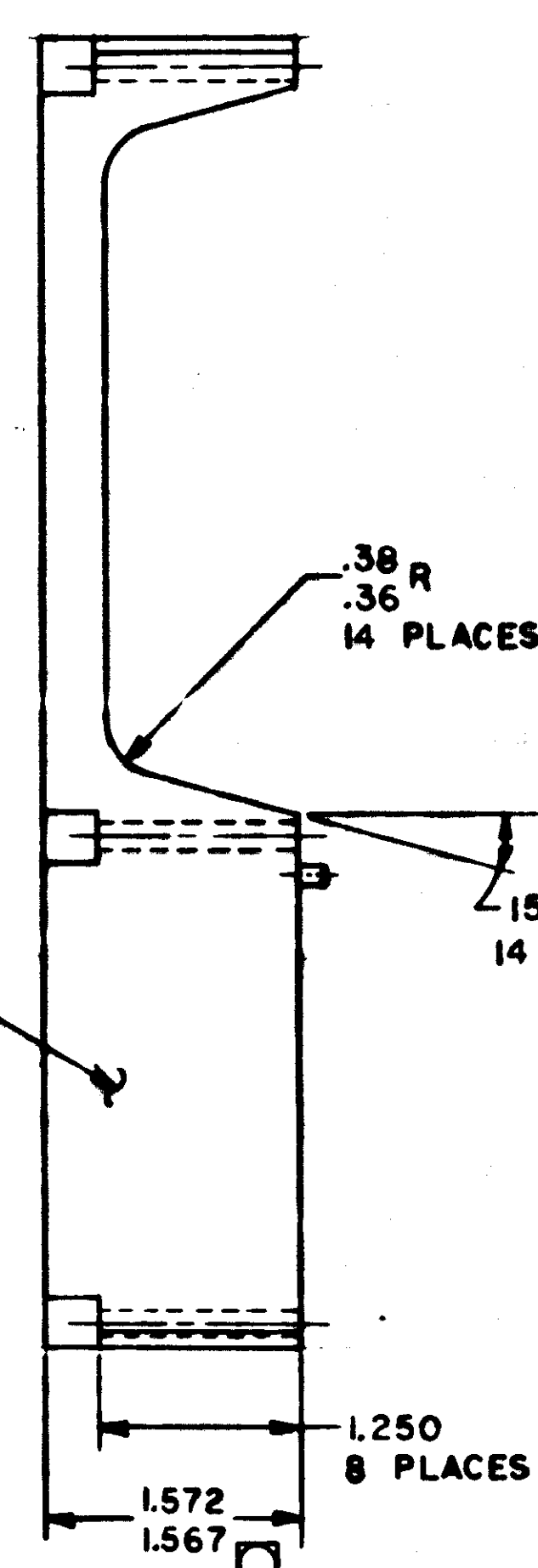
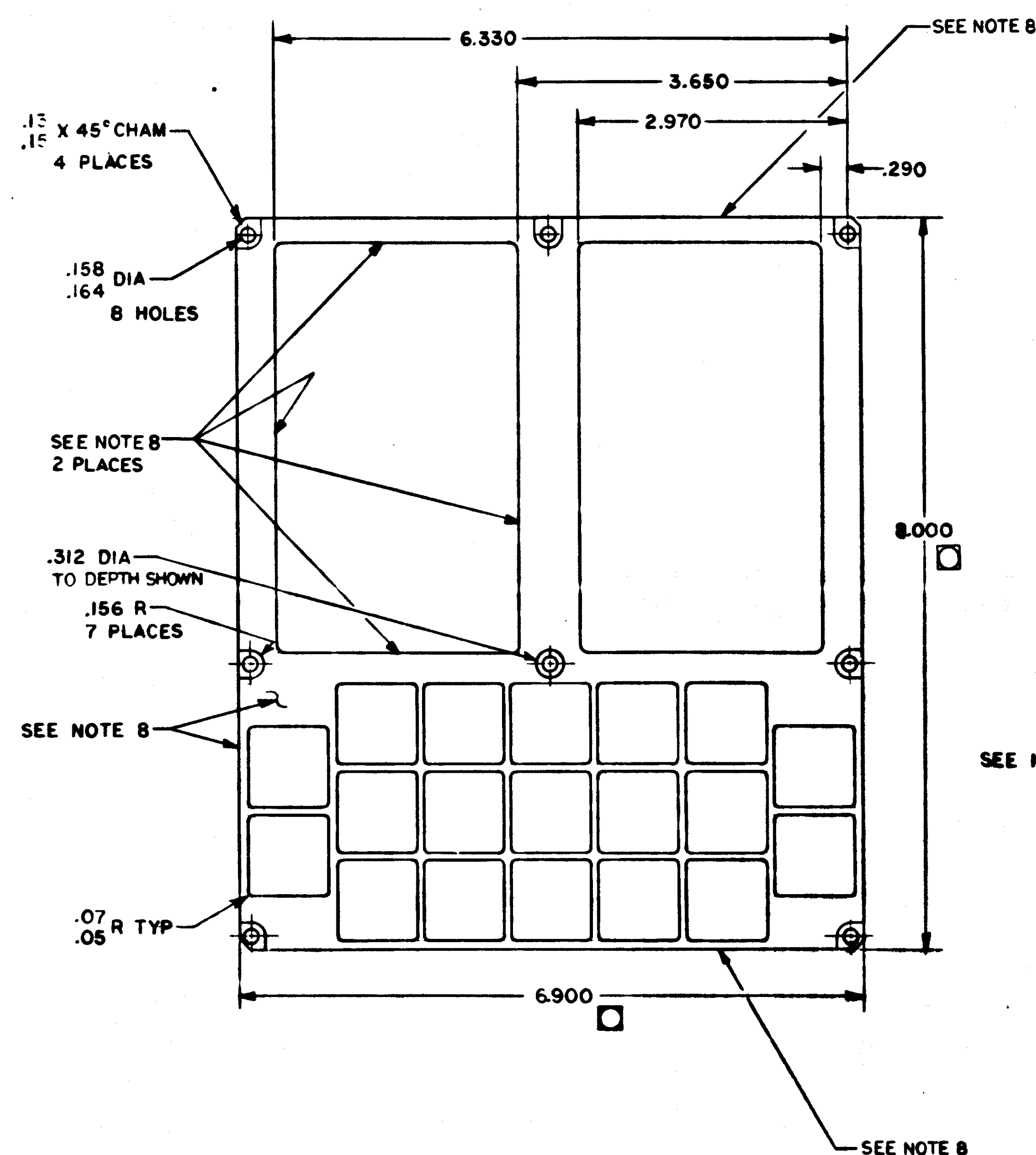
6.91 MAX REF
2.53
2.58
4.900 MAX
UNIT MTG SURFACE
CONNECTOR MTG SURFACE



- NOTES
1. DIMENSIONS CONTROLLED BY ICD MHOI-01305-116
 2. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 3. WEIGHT *See*
 4. ⊙ INDICATES CENTER OF GRAVITY *Small letter*

2003956

QTY REQD	PART OR IDENTIFYING NO	NAME, RELATURE OR C. DESCRIPTION
LIST OF MATERIALS		
MANNED SPACECRAFT CENTER		
AGC DSKY OUTLINE DRAWING		
CODE IDENT NO 80230		
SCALE 1/1		

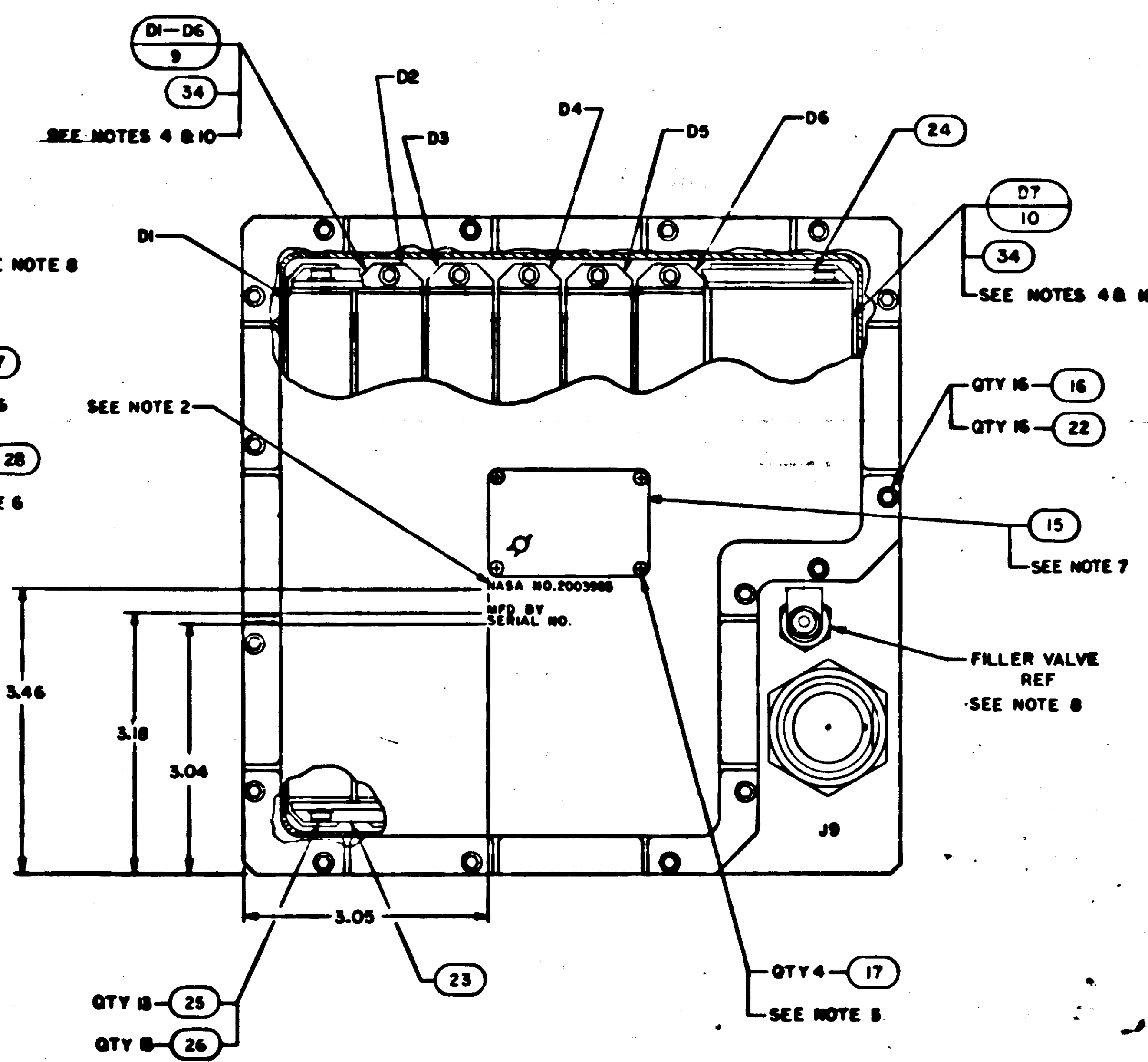
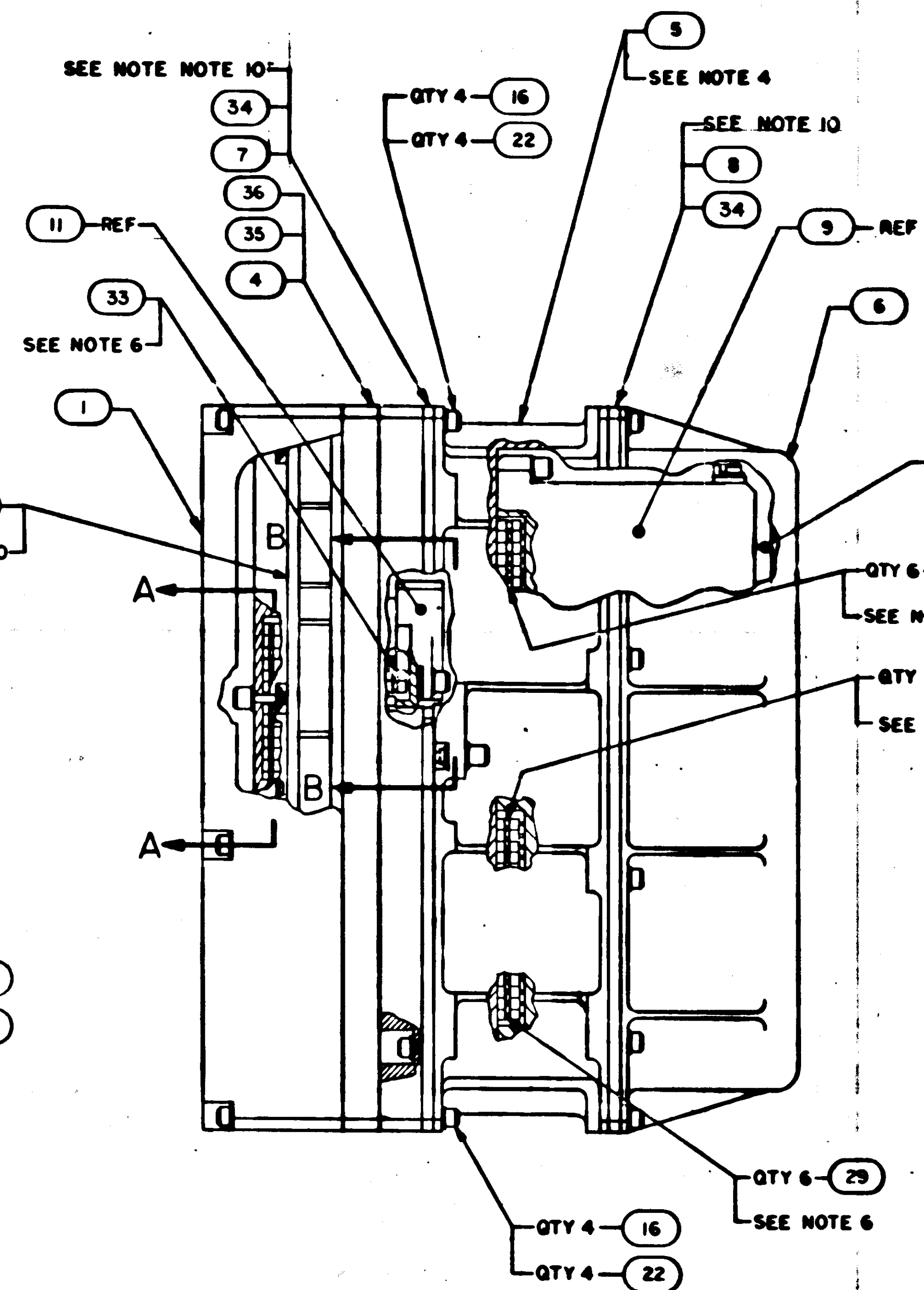
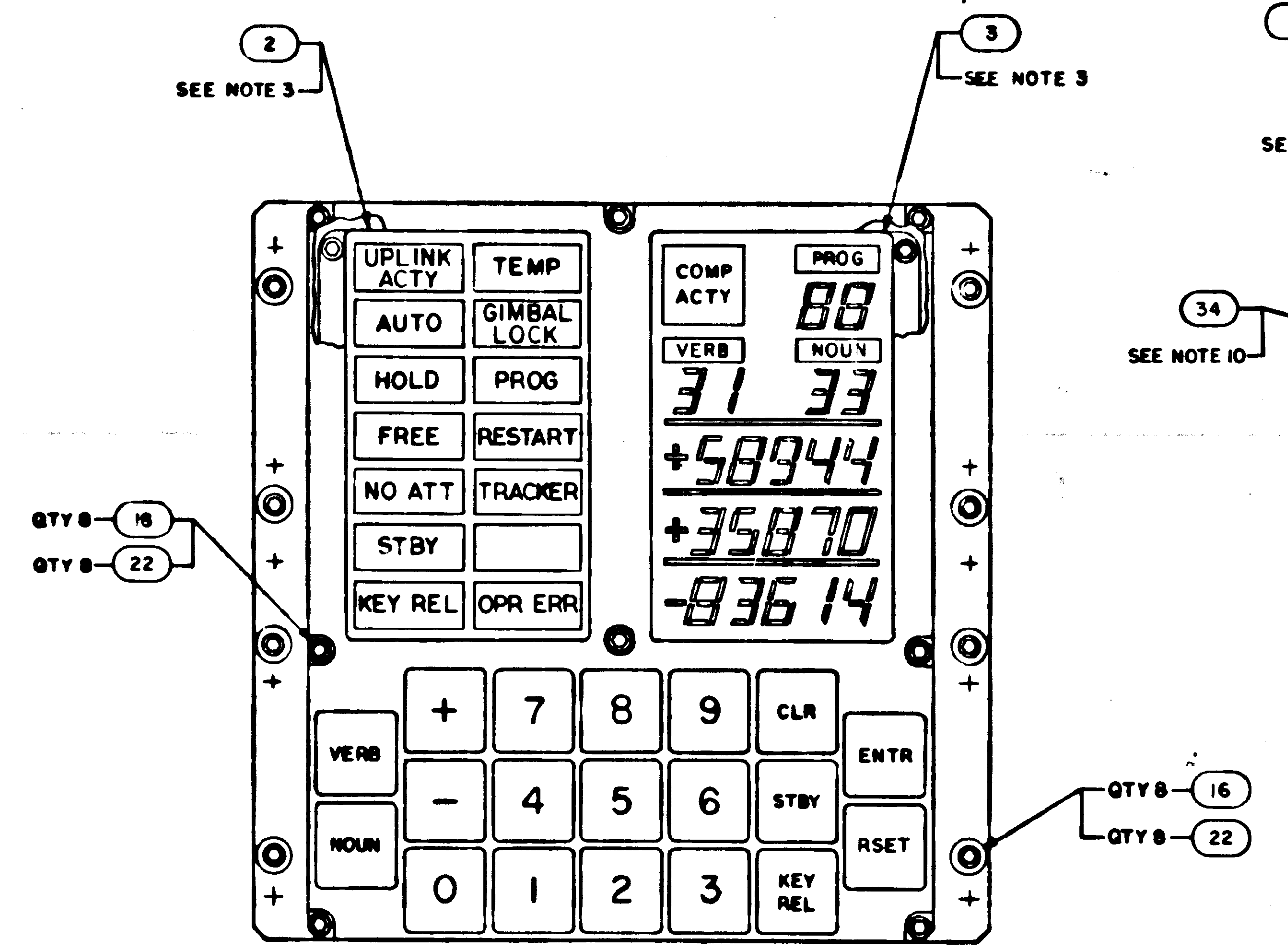
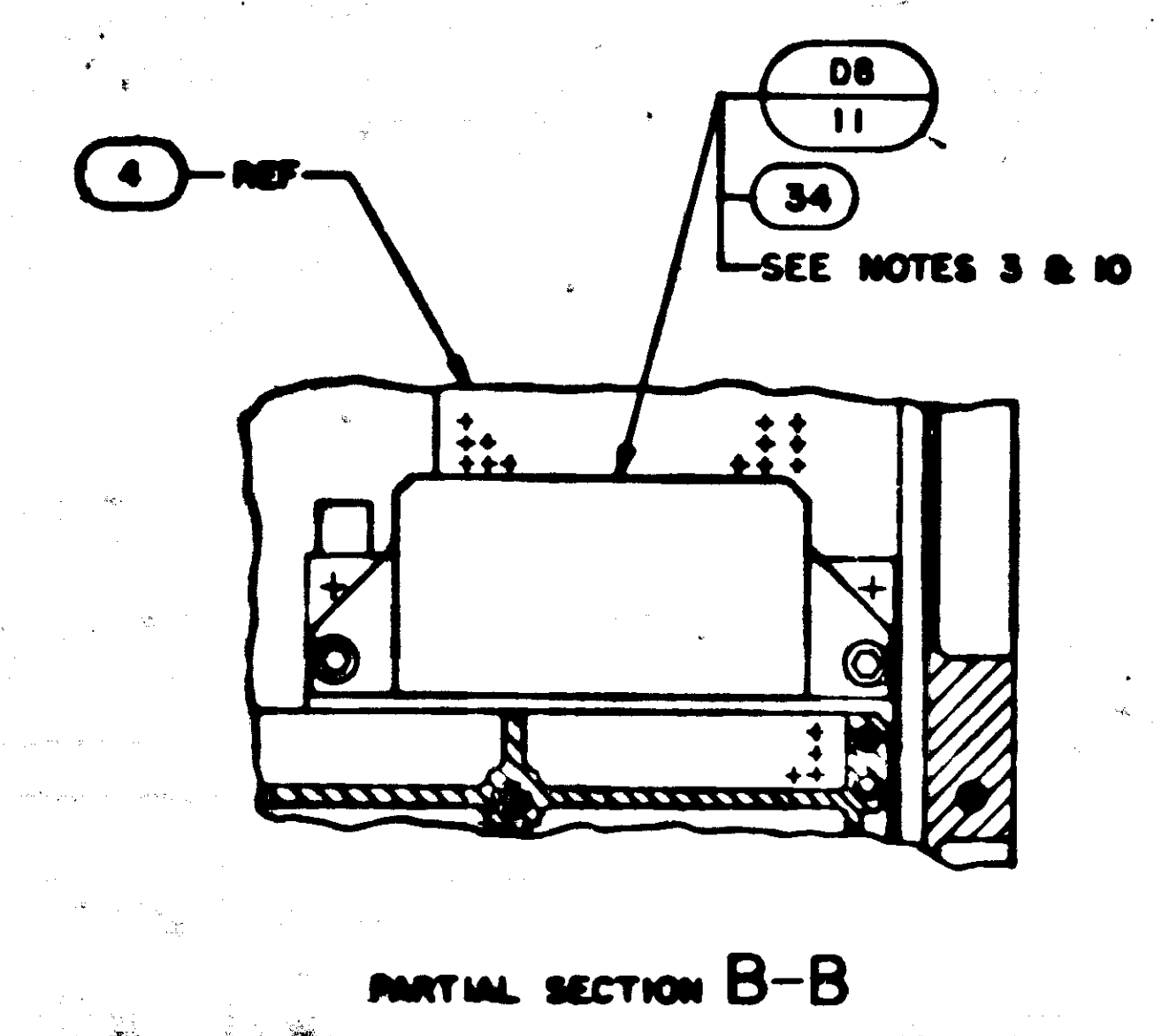
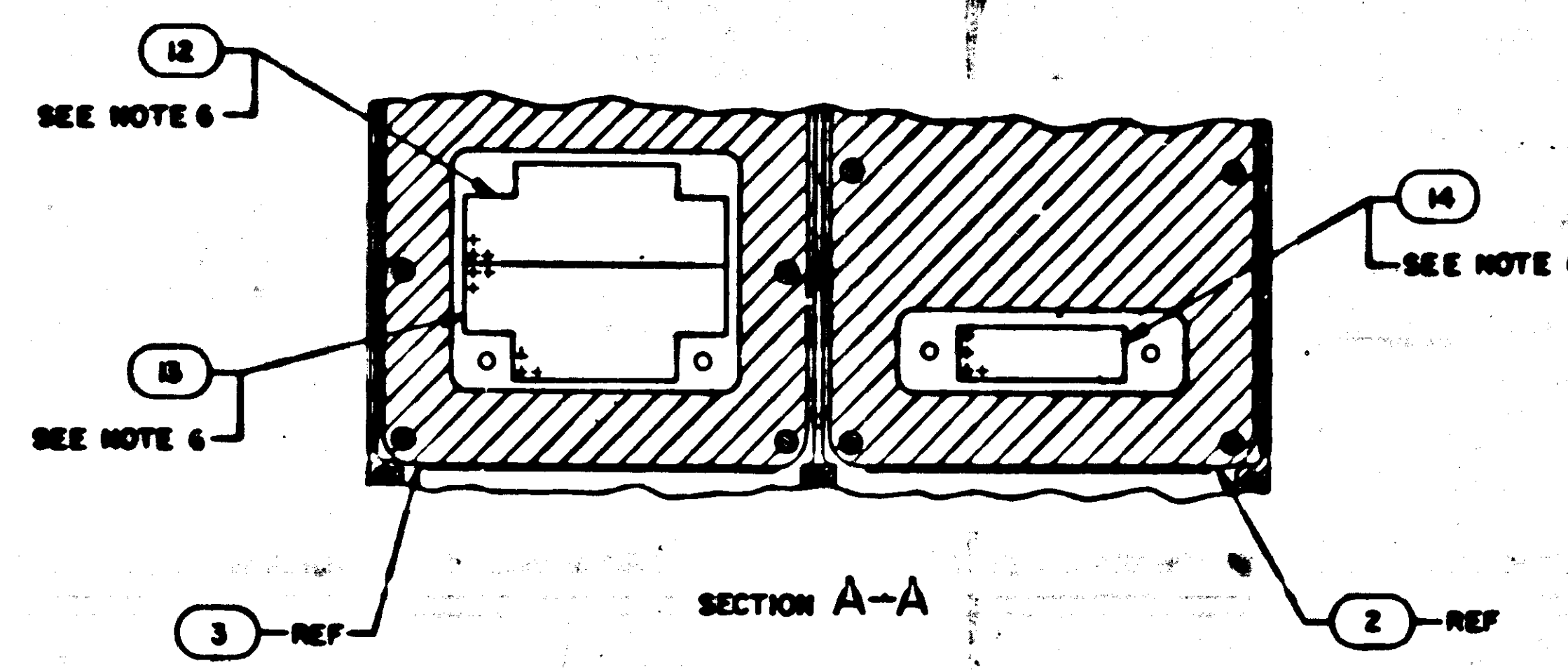
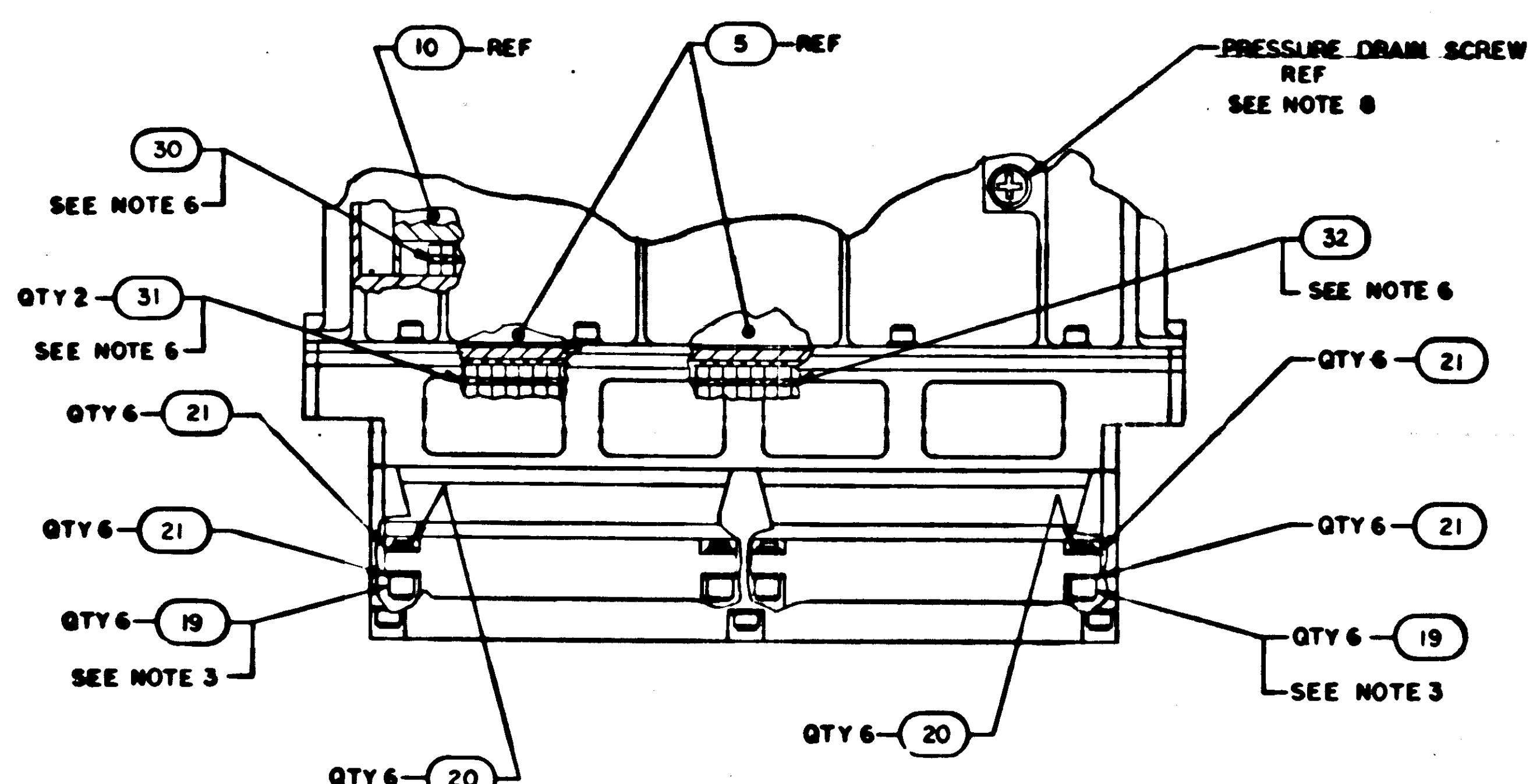


NOTES

1. MATL:6061-T6-AL PER QQ-A-250/11,TEMP 6
2. REMOVE BURRS AND SHARP EDGES.005/015
3. ALL SURFACES 125/
4. CHROMATE PER MIL-C-5541,TYPE II,GRADE C,CLASS B
5. UNLESS OTHERWISE SPECIFIED ALL FILLETS AND RADII TO BE .09 R MAX
6. MARK.10/14 HIGH BLACK CHARACTERS PER NID002019 AND NID002122,TYPE II,CLASS 2 USING INK 100627-10
7. DIMENSIONS CONTROLLED BY ICD MHOI
8. PAINT INDICATED SURFACES WITH 1010729-1 MED GRAY EPOXY ENAMEL PER NID002110
9. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

2	MS16555-625	PIN, CONEL
1	2004929-001	COVER, FRC
QTY NEED	PART OR IDENTIFYING NO.	IN. SPECIFICATION OR DESCRIPTION
5		
M I T INSTRUMENTATION LAB Contract # 1000001		MANNED : SPACECRAFT CENTER FIBRATION, TEXAS
DRAWING NO. DATE <i>10/2/68</i> CHECKED <i>[Signature]</i> APPROVAL <i>[Signature]</i> APPROVAL <i>[Signature]</i>		COVER, FRONT A/C JSKY
NASA APPROVAL <i>[Signature]</i> MIL APPROVAL <i>[Signature]</i>		CODE IDENT NO. <i>80230 J</i> SIZE NADA DRAWING NO. <i>200492</i>
MIL APPROVAL		SLA(S) (7) WT INCHES

2003985



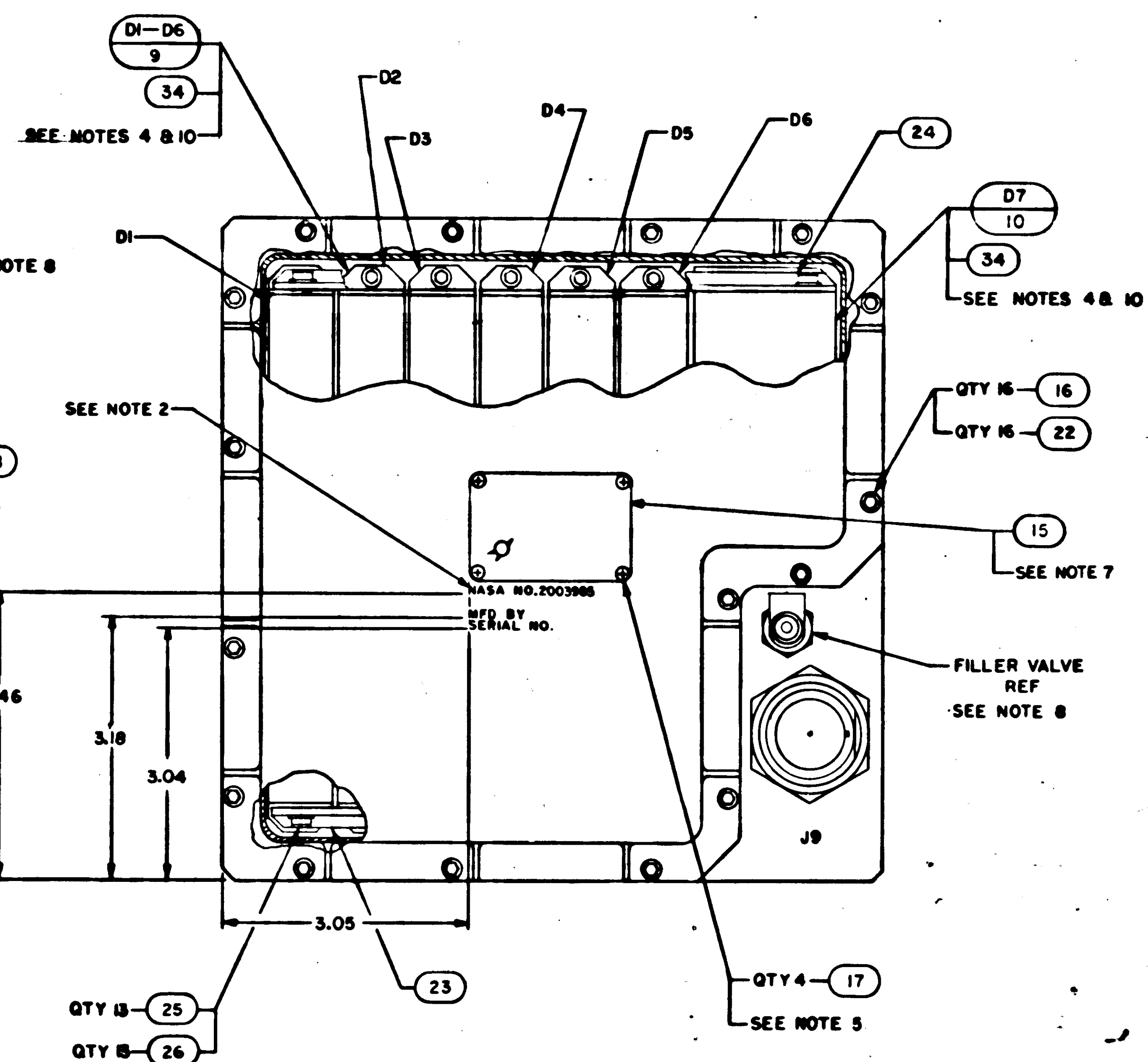
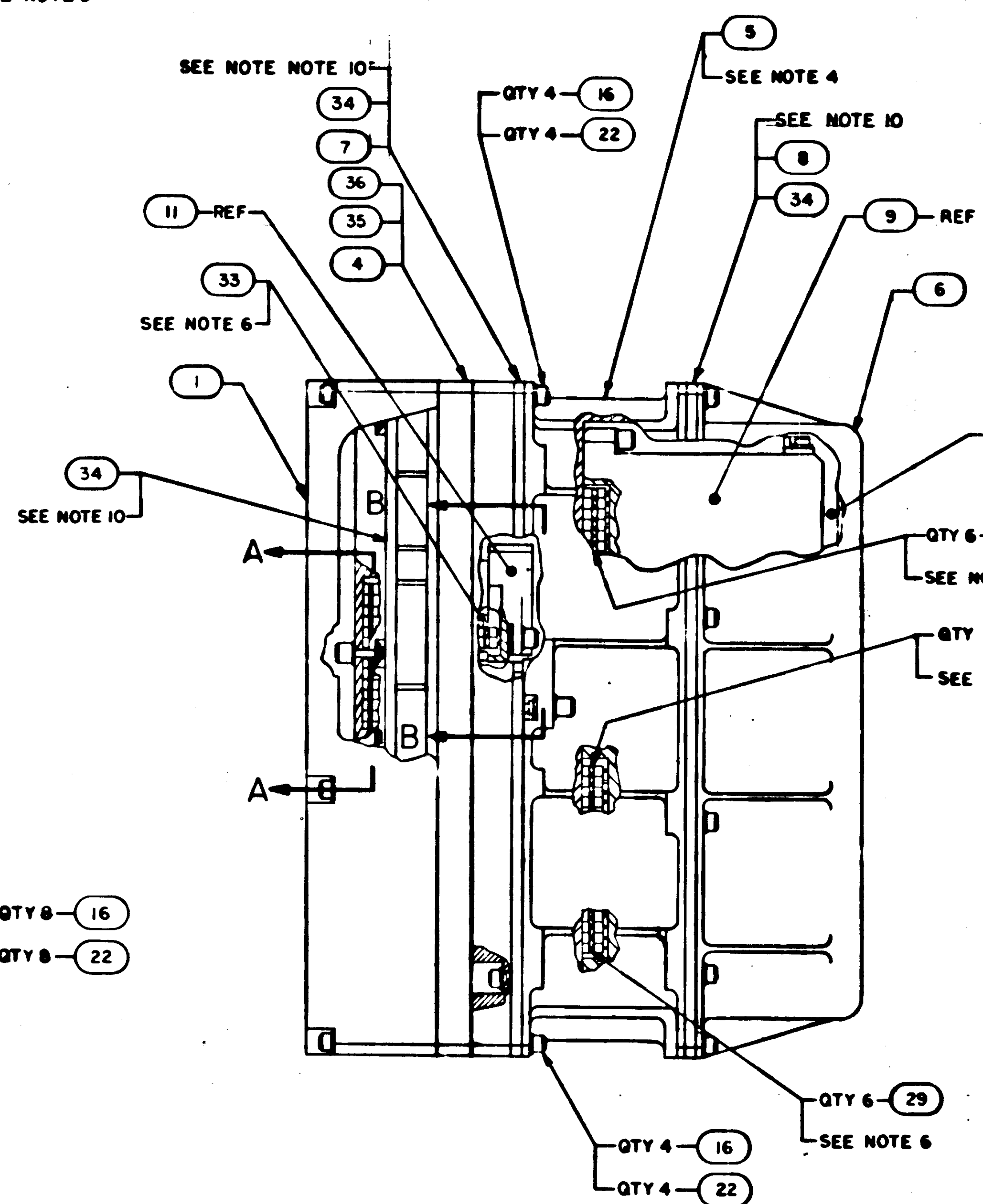
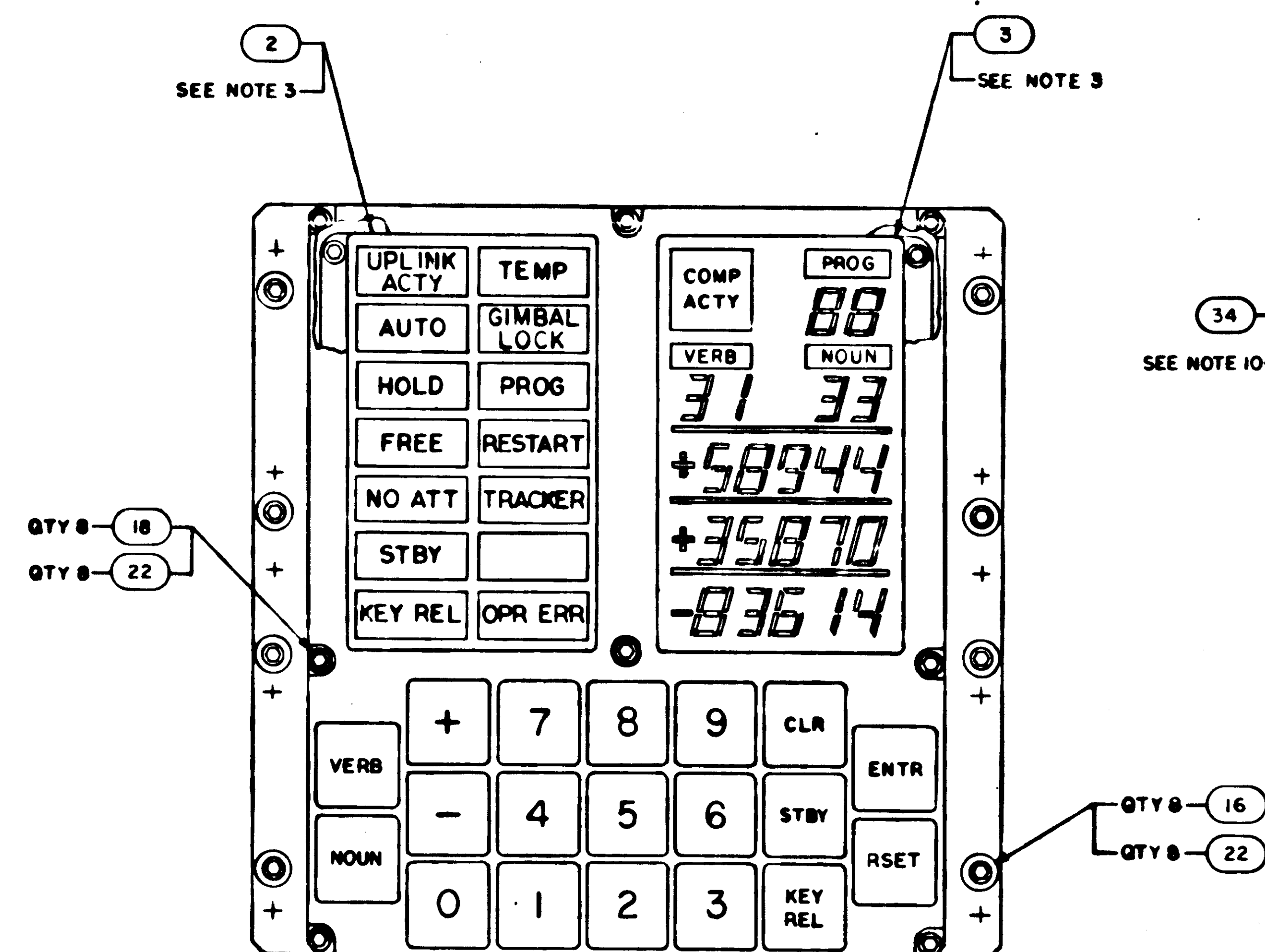
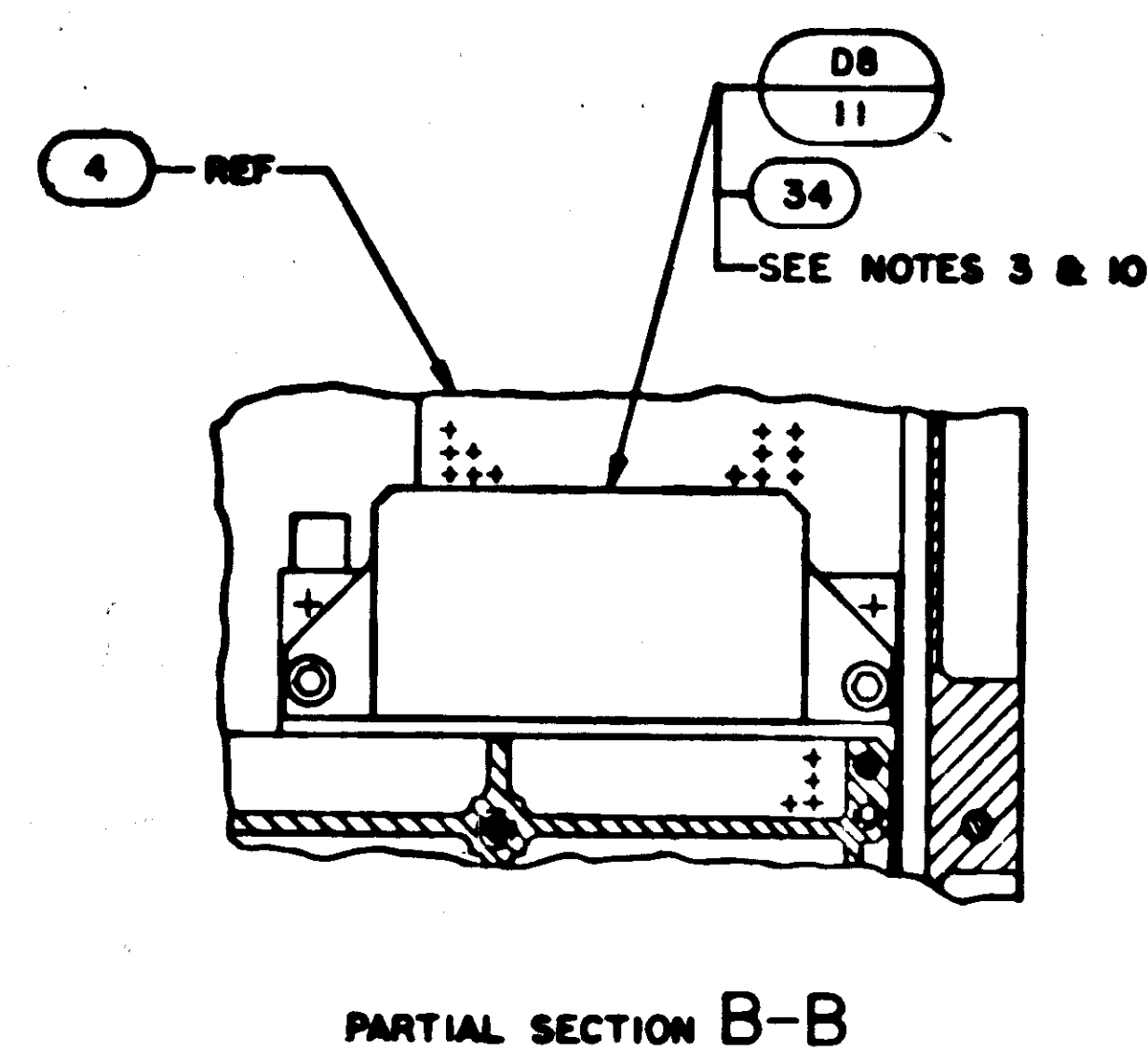
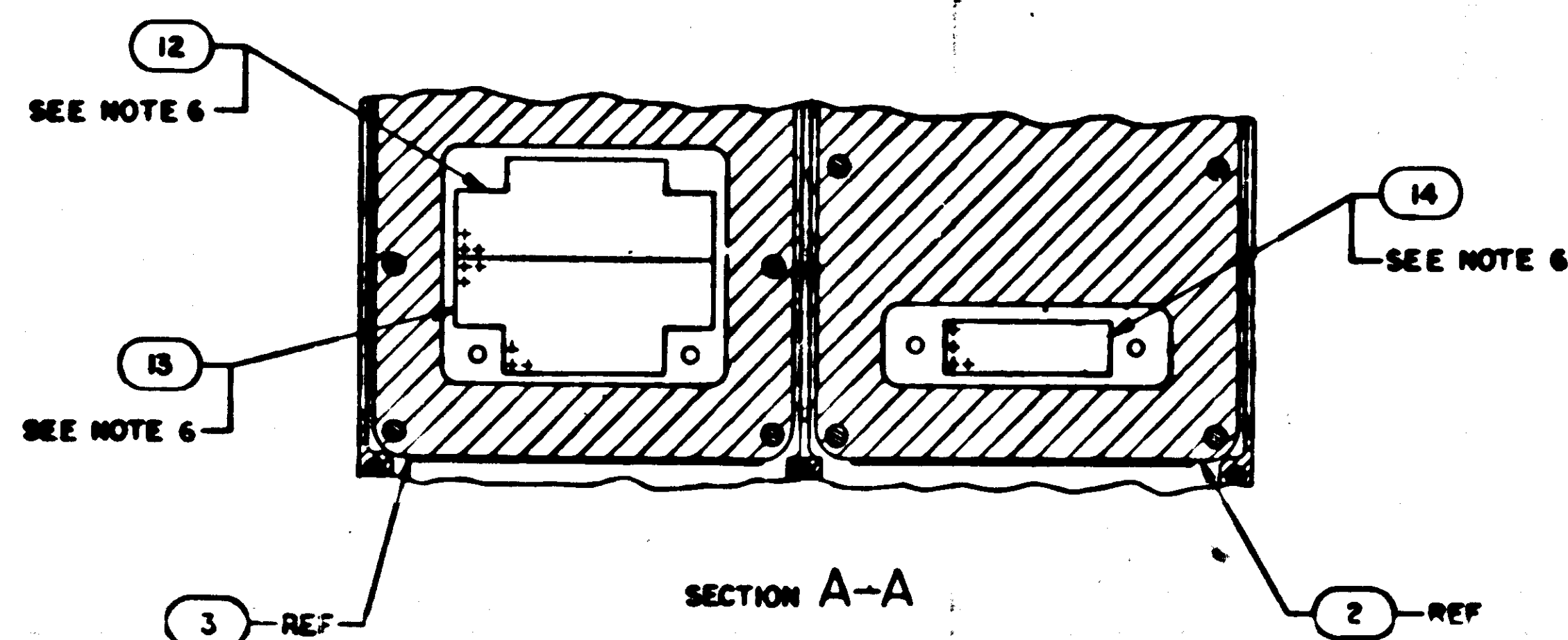
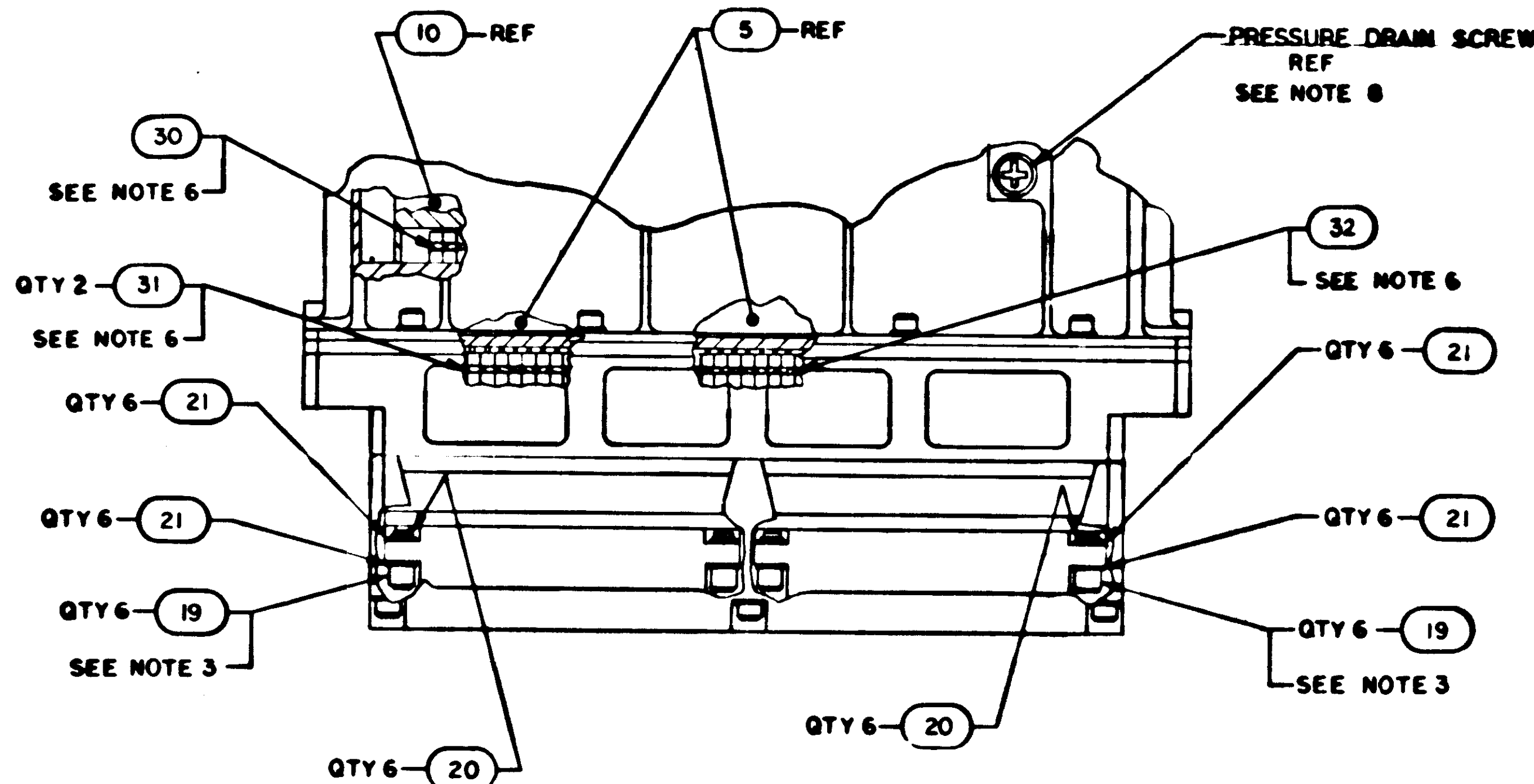
- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MARK 10/08 HIGH BLACK CHARACTERS PER ND100209 AND ND100212, TYPE II, CLASS 2 AND SERIALIZE PER ND100203 USING INK 1006271-11
 3. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 TO BE 7-10 INCH POUNDS
 4. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9 & 10 TO BE 16-19 INCH POUNDS
 5. APPLY SEALING COMPOUND MIL-S-22473, GRADE H TO FIND NO. 17
 6. BOND FIND NO. 12, 13 TO FIND NO. 3, FIND NO. 14 TO FIND NO. 2, FIND NO. 27, 28, 29 TO FIND NO. 9, FIND NO. 30 TO FIND NO. 10, FIND NO. 31, 32 TO FIND NO. 5, FIND NO. 33 TO FIND NO. 11 PER ND1002287
 7. STAMP CHARACTERS PER ND100209 AND SERIALIZE PER ND1006123
 8. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM OF 4.3% AIR TO 1.05/110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
 9. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS OF PS2003985
 10. APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 7, 8, 9, 10 AND 11
DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4, 7, AND 8
 11. AR DENOTES AS REQUIRED

QTY	QTY REQD	QTY REQD	QTY REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1	1	1	2003956	OUTLINE DRAWING	REF
1	1	1	1	2003957	SIGNAL PIN ASSIGNMENT	REF
1	1	1	1	2003951	INTERCONNECTING DIAGRAM	REF
1	1	1	1	2003950	SIGNAL FLOW DIAGRAM	REF
1	1	1	1	2003903-031	FRONT HOUSING ASSY	36
1	1	1	1	2003903-021	FRONT HOUSING ASSY	35
AR	AR	AR	AR	1006279	SILICONE COMPOUND	34
1	1	1	1	2004955-005	GASKET	33
1	1	1	1	2004955-008	GASKET	32
2	2	2	2	2004955-007	GASKET	31
1	1	1	1	2004955-006	GASKET	30
6	6	6	6	2004955-003	GASKET	29
6	6	6	6	2004955-002	GASKET	28
6	6	6	6	2004955-004	GASKET	27
13	13	13	13	MS620C-10	SCREW, HEX SOCKET HEAD	26
13	13	13	13	NAS620C4	WASHER, FLAT	25
1	1	1	1	2004958	BRACKET, MODULE	24
1	1	1	1	2004959	BRACKET, MODULE	23
40	40	40	40	NAS620C6	WASHER, FLAT	22
24	24	24	24	1004546-4	WASHER, FLAT	21
12	12	12	12	MS6633-4014	RING, RETAINING	20
12	12	12	12	2004932-001	SCREW, JACKING	19
8	8	8	8	1001489-59	SCREW, HEX SOCKET HEAD	18
4	4	4	4	MS35216-1	SCREW, PAN HEAD, CROSS RECESSED	17
32	32	32	32	MS16995-18	SCREW, CAP, SOCKET HEAD	16
1	1	1	1	1004260-20	NAMEPLATE	15
1	1	1	1	2004955-001	GASKET	14
1	1	1	1	2004953-002	GASKET	13
1	1	1	1	2004953-001	GASKET	12
1	1	1	1	2003908-011	KEYBOARD MODULE ASSY D8	11
1	1	1	1	2003901-011	POWER SUPPLY ASSY MODULE D7	10
6	6	6	6	2003902-011	INDICATOR DRIVER MODULE D1-6	9
1	1	1	1	1006349	GASKET, BONDED, RUBBER	8
1	1	1	1	1006350	GASKET, BONDED, RUBBER	7
1	1	1	1	2004900	COVER, REAR	6
1	1	1	1	2003954-011	MAIN HOUSING ASSY	5
1	1	1	1	2003903-011	FRONT HOUSING ASSY	4
1	1	1	1	1006315	INDICATOR, DIGITAL	3
1	1	1	1	1006316	INDICATOR, ALARM	2
1	1	1	1	2004929-011	COVER, FRONT	1

MANNED SPACECRAFT CENTER HOUSTON, TEXAS	
AGC DSKY ASSEMBLY	
CODE IDENT NO. 80230 J	NASA DRAWING NO. 2003985
SCALE 1/1	SHEET 1 OF 1

2003985 B

REV	DESCRIPTION	DATE	BY	APP
A	REVISED PER TDR 22462			
B	REVISED PER TDR 23637			

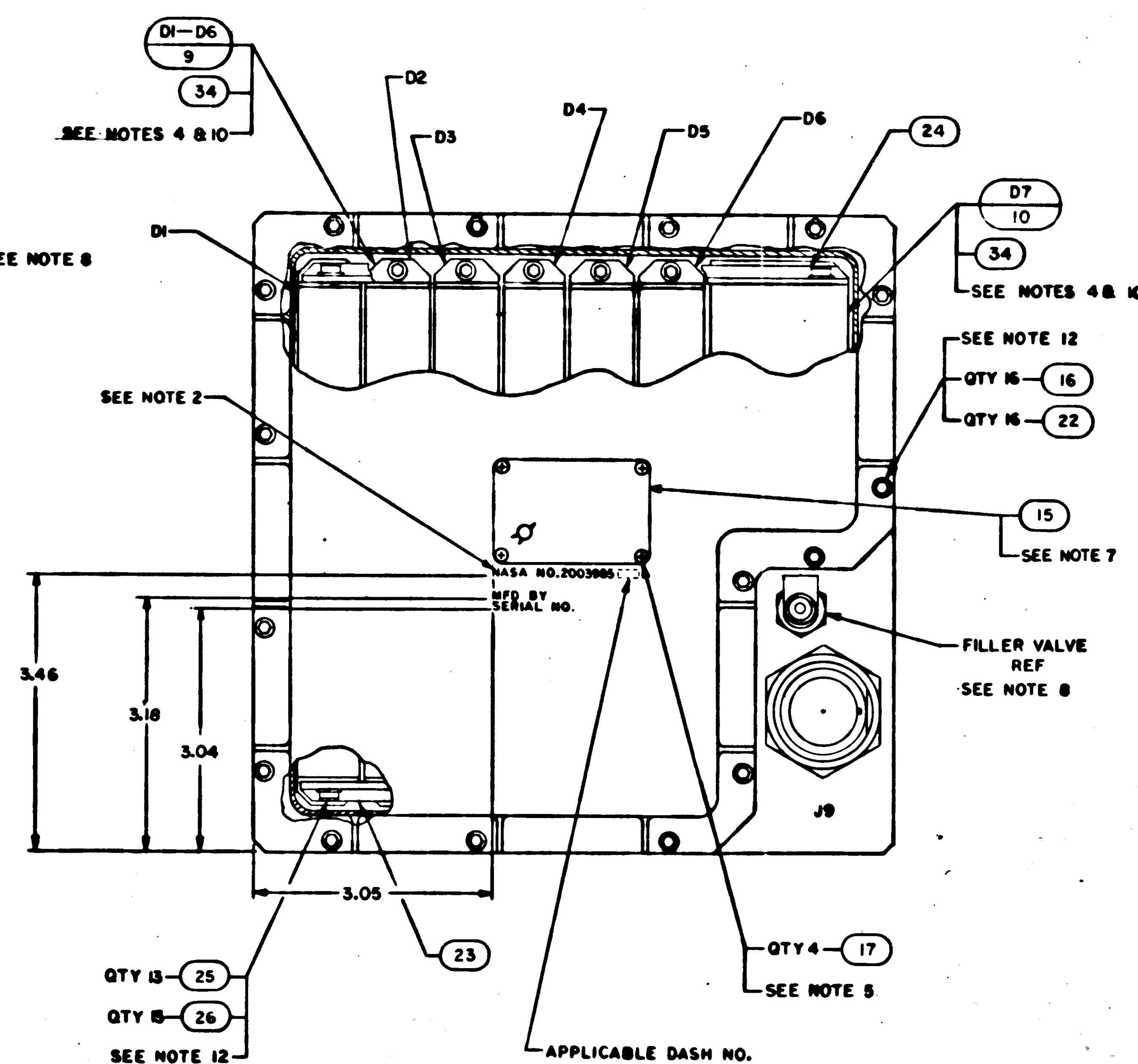
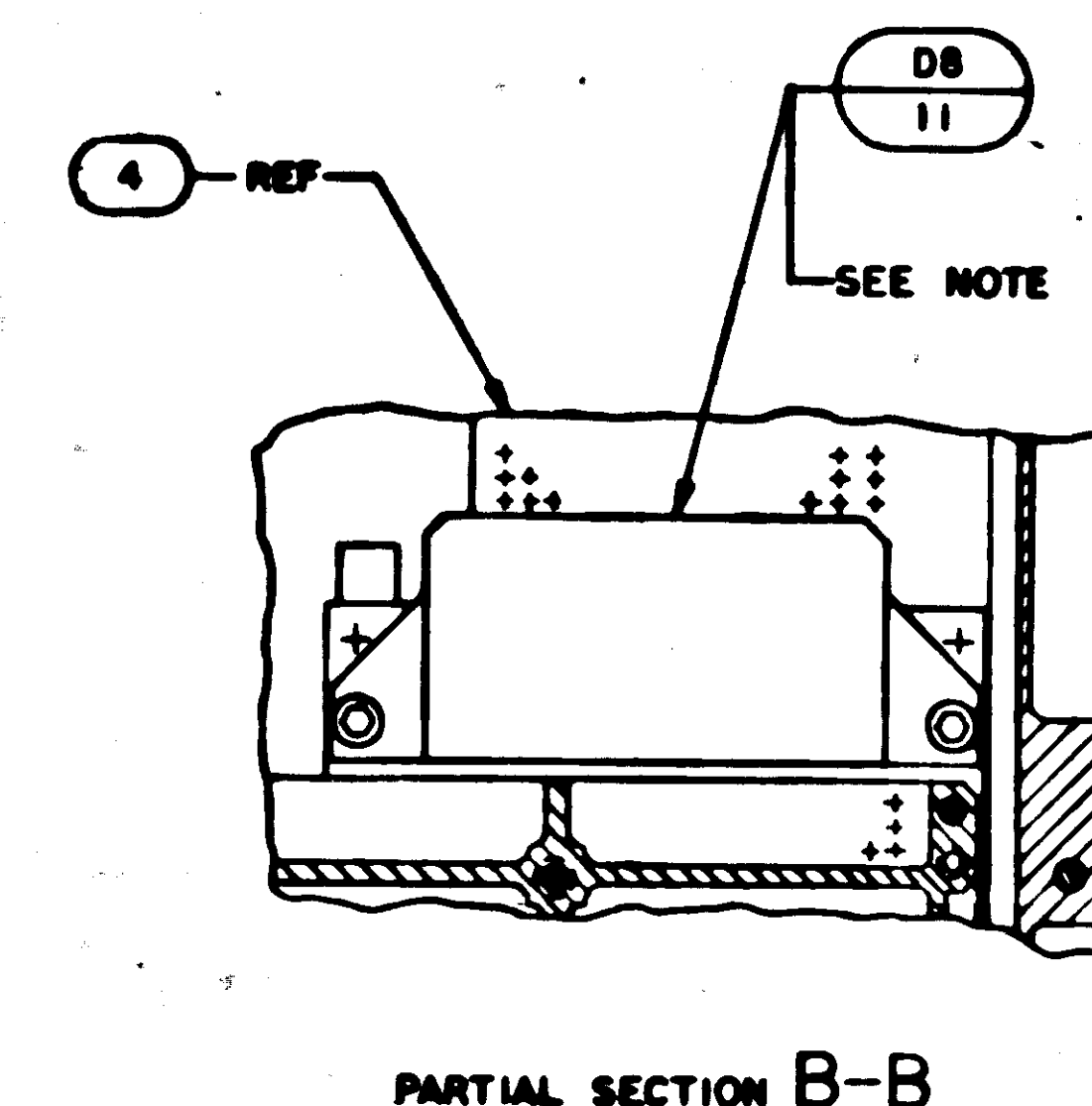
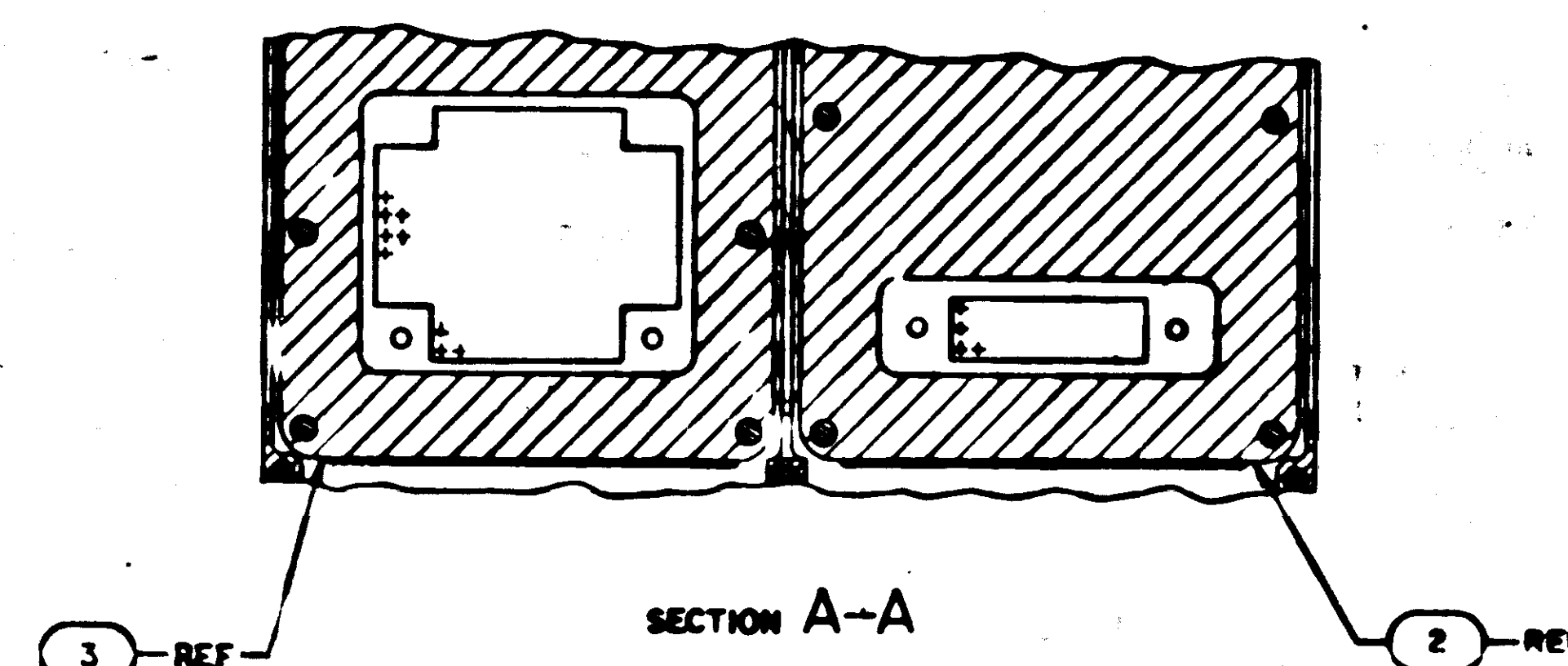


- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MARK 10/08 HIGH BLACK CHARACTERS PER ND1002019 AND ND1002122, TYPE II, CLASS 2
 3. AND SERIALIZE PER ND1002023 USING INK 1006271-11
 4. MOUNTING TORQUE FOR FINI NO. 19 AND JACK SCREWS OF FIND NO. 11 TO BE 7-10 INCH POUNDS
 5. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9, 8, 10 TO BE 15-19 INCH POUNDS
 6. APPLY SEALING COMPOUND MIL-5-22473 GRADE N TO FIND NO. 17
 7. BOND FIND NO. 12, 13 TO FIND NO. 3, FIND NO. 14 TO FIND NO. 2, FIND NO. 27, 28, 29 TO FIND NO. 9, FIND NO. 30 TO FIND NO. 10, FIND NO. 31, 32 TO FIND NO. 5, FIND NO. 33 TO FIND NO. 11 PER ND1002237
 8. STAMP CHARACTERS PER ND1002019 AND SERIALIZE PER ND1002023
 9. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM OF 4.3% AIR TO 1.05/1.10 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
 10. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS OF PS2003985
 11. APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 7, 8, 9, 10 AND 11
 12. DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4, 7, AND 8
 13. 11AR DENOTES AS REQUIRED

QTY	REQD	QTY	REQD	QTY	REQD	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	FIND NO.
1	1	1	1	1	1	2003956	OUTLINE DRAWING	REF
1	1	1	1	1	1	2003957	SIGNAL PIN ASSIGNMENT	REF
1	1	1	1	1	1	2003951	INTERCONNECTING DIAGRAM	REF
1	1	1	1	1	1	2003950	SIGNAL FLOW DIAGRAM	REF
1	1	1	1	1	1	2003903-031	FRONT HOUSING ASSY	36
1	1	1	1	1	1	2003903-021	FRONT HOUSING ASSY	35
AR	AR	AR	AR	AR	AR	1006179	SILICONE COMPOUND	34
1	1	1	1	1	1	2004955-005	GASKET	33
1	1	1	1	1	1	2004955-008	GASKET	32
2	2	2	2	2	2	2004955-007	GASKET	31
1	1	1	1	1	1	2004955-006	GASKET	30
6	6	6	6	6	6	2004955-003	GASKET	29
6	6	6	6	6	6	2004955-002	GASKET	28
6	6	6	6	6	6	2004955-004	GASKET	27
13	13	13	13	13	13	MS16202-10	SCREW, HEX SOCKET HEAD	26
13	13	13	13	13	13	NAS620C4	WASHER, FLAT	25
1	1	1	1	1	1	2004950	BRACKET, MODULE	24
1	1	1	1	1	1	2004959	BRACKET, MODULE	23
40	40	40	40	40	40	NAS620C6	WASHER, FLAT	22
24	24	24	24	24	24	1004546-4	WASHER, FLAT	21
12	12	12	12	12	12	MS16633-4014	RING, RETAINING	20
12	12	12	12	12	12	2004932-001	SCREW, JACKING	19
8	8	8	8	8	8	1001489-59	SCREW, HEX SOCKET HEAD	18
4	4	4	4	4	4	MS35216-1	SCREW, PAN HEAD, CROSS RECESSED	17
32	32	32	32	32	32	MS16995-18	SCREW, CAP, SOCKET HEAD	16
1	1	1	1	1	1	1004260-20	NAMEPLATE	15
1	1	1	1	1	1	2004955-001	GASKET	14
1	1	1	1	1	1	2004953-002	GASKET	13
1	1	1	1	1	1	2004953-001	GASKET	12
1	1	1	1	1	1	2003909-011	KEYBOARD MODULE ASSY D8	11
1	1	1	1	1	1	2003901-011	POWER SUPPLY ASSY MODULE D7	10
6	6	6	6	6	6	2003902-011	INDICATOR DRIVER MODULE D1-D6	9
1	1	1	1	1	1	1006349	GASKET, BC IDED, RUBBER	8
1	1	1	1	1	1	1006350	GASKET, BC IDED, RUBBER	7
1	1	1	1	1	1	2004900	COVER, REAR	6
1	1	1	1	1	1	2003954-011	MAIN HOUSING ASSY	5
1	1	1	1	1	1	2003903-011	FRONT HOUSING ASSY	4
1	1	1	1	1	1	2004935	INDICATOR, DIGITAL	3
1	1	1	1	1	1	1006316	INDICATOR, ALARM	2
1	1	1	1	1	1	2004929-011	COVER, FRONT	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS DO NOT SCALE THIS DRAWING MATERIAL		INSTRUMENTATION LAB CHECKED BY: [Signature] DATE: 8/2/66 APPROVED BY: [Signature] DATE: 8/2/66		MANNED SPACECRAFT CENTER HEADQUARTERS AGC DSKY ASSEMBLY	
HEAT TREATMENT	WELD ON	FINISH TOLERANCE	APPLICATION	SCALE 1/1	SHEET 1 OF 1

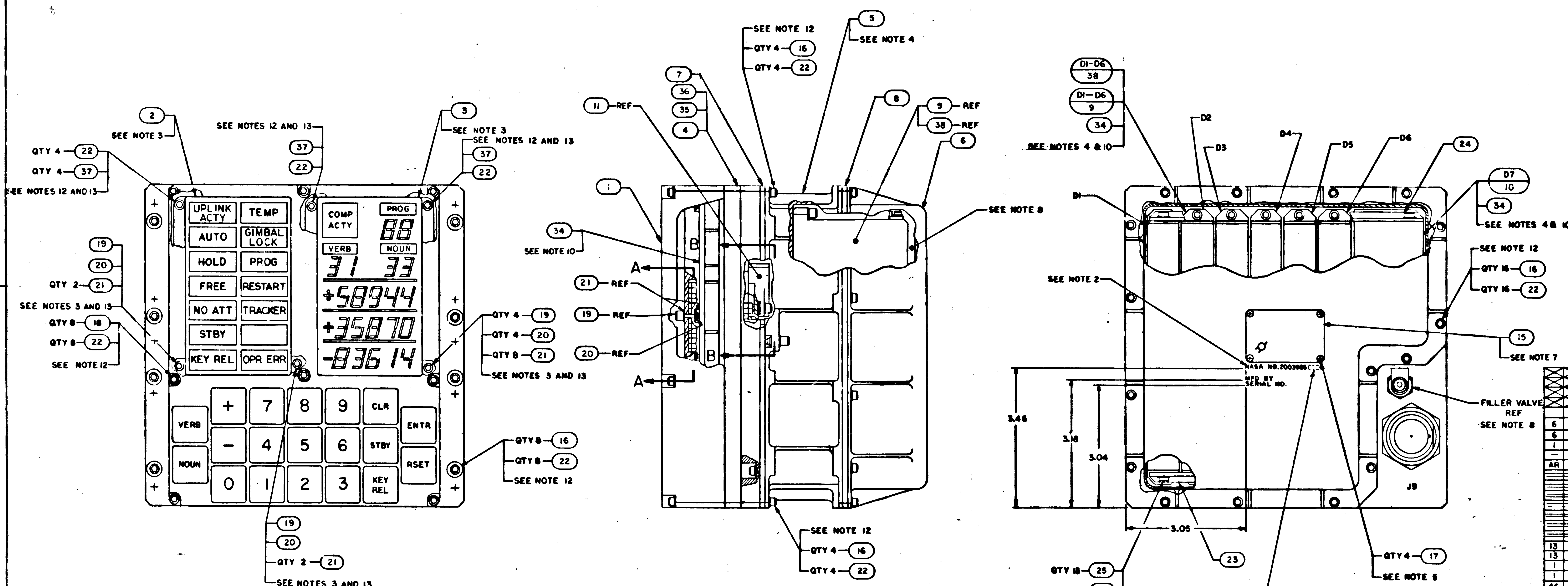
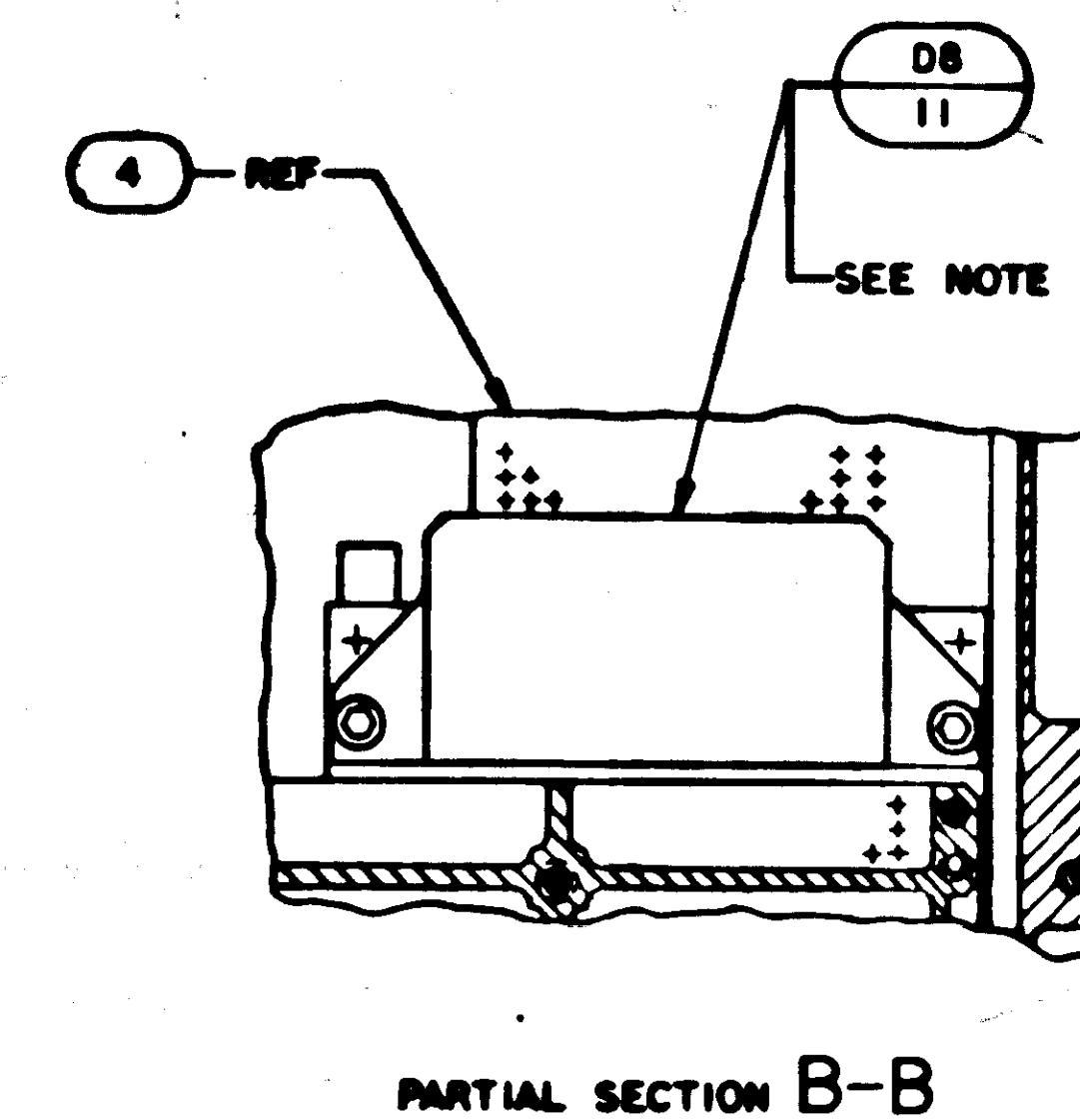
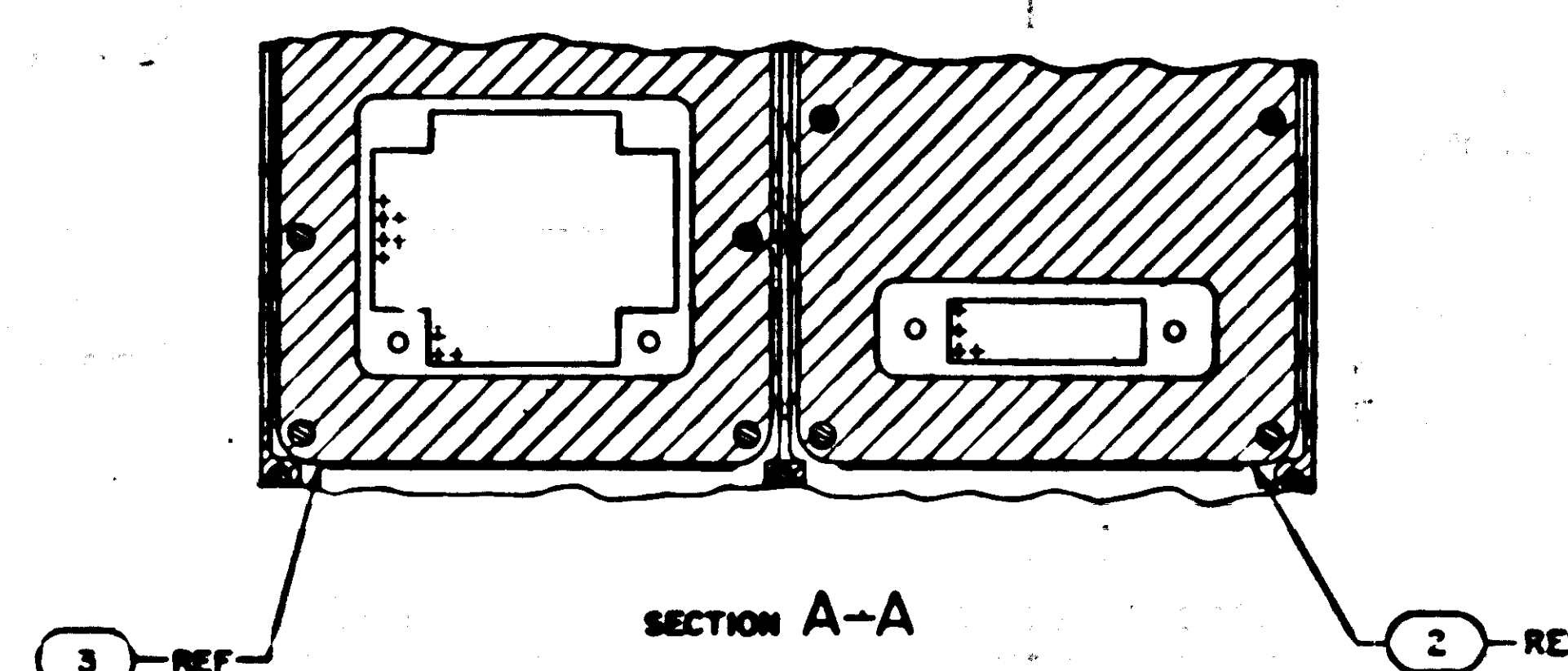
2003985 B



- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MARK 1Q/08 HIGH WHITE CHARACTER SET NO002019 AND ND0100212, TYPE II, CLASS 2
 3. AND SERIALIZE PER ND0100223 USING INK 1000271-I
 4. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 TO BE 7-10 INCH POUNDS
 4. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9 & 10 TO BE 15-19 INCH POUNDS
 5. APPLY SEALING COMPOUND MIL-S-22473 GRADE H TO FIND NO. 17
 - ~~6. BOND FIND NO. 12, 13 TO FIND NO. 3, FIND NO. 14 TO FIND NO. 5, FIND NO. 27, 28, 29 TO FIND NO. 9~~
 - ~~7. FIND NO. 30 TO FIND NO. 10, FIND NO. 31, 32 TO FIND NO. 5, FIND NO. 33 TO FIND NO. 11 PER ND0100223~~
 7. STAMP CHARACTERS PER ND0100219 AND SERIALIZE PER ND0100203
 8. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM OF 4.3% AIR TO .75/110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
 9. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS OF PS2003985
 10. APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 9 AND 10
DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4,
 11. AR DENOTES AS REQUIRED
 12. MOUNTING TORQUE FOR FIND NO. 16 AND 37 TO BE 8-9 INCH POUNDS
 12. MOUNTING TORQUE FOR FIND NO. 18 AND 26 TO BE 3.5 -4.5 INCH POUNDS
 13. FIND NO. 2 AND 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 4, 35 OR 36
USING FIND NO. 19, BEFORE INSTALLING FIND NO. 37

[illegible]

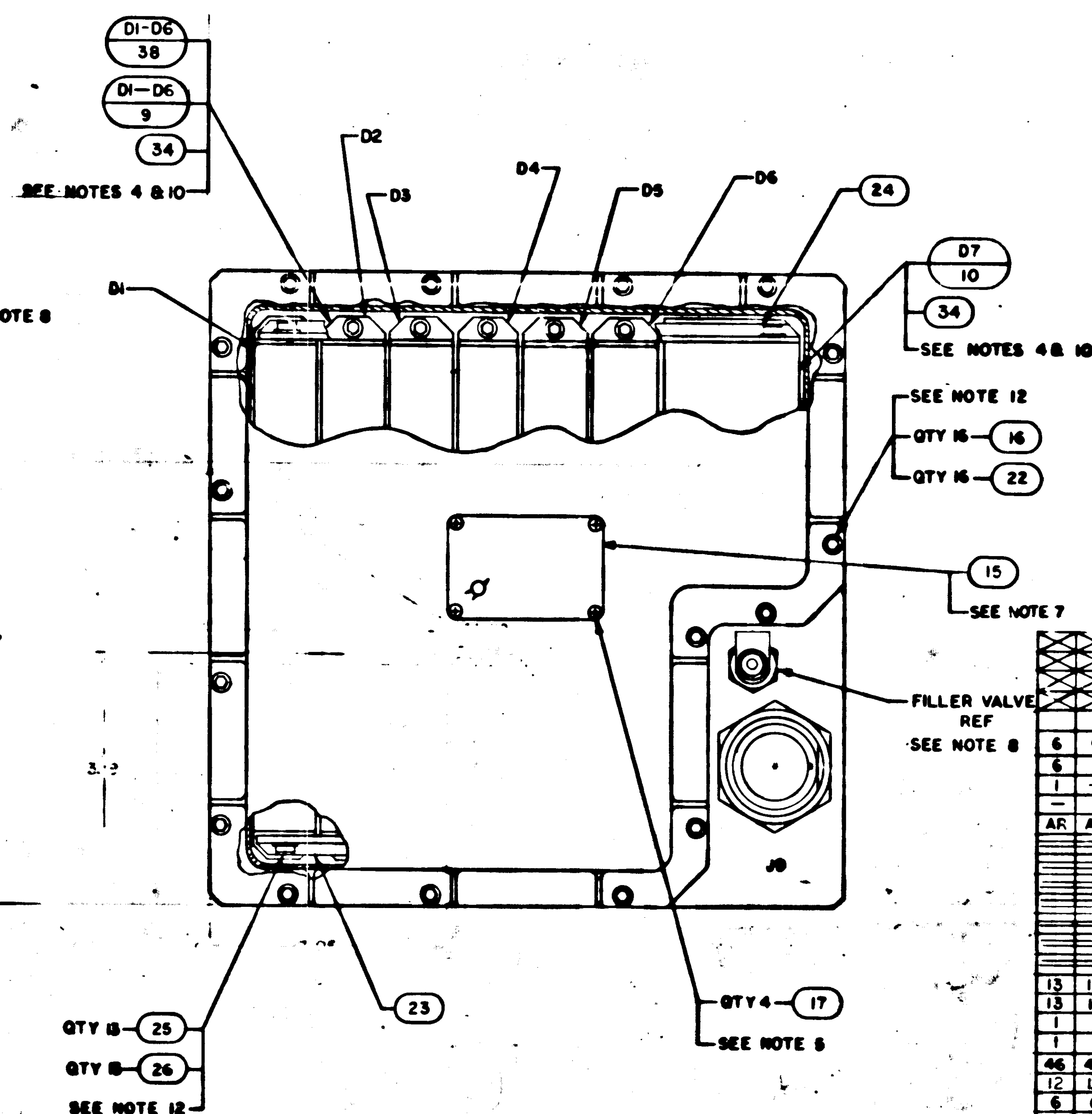
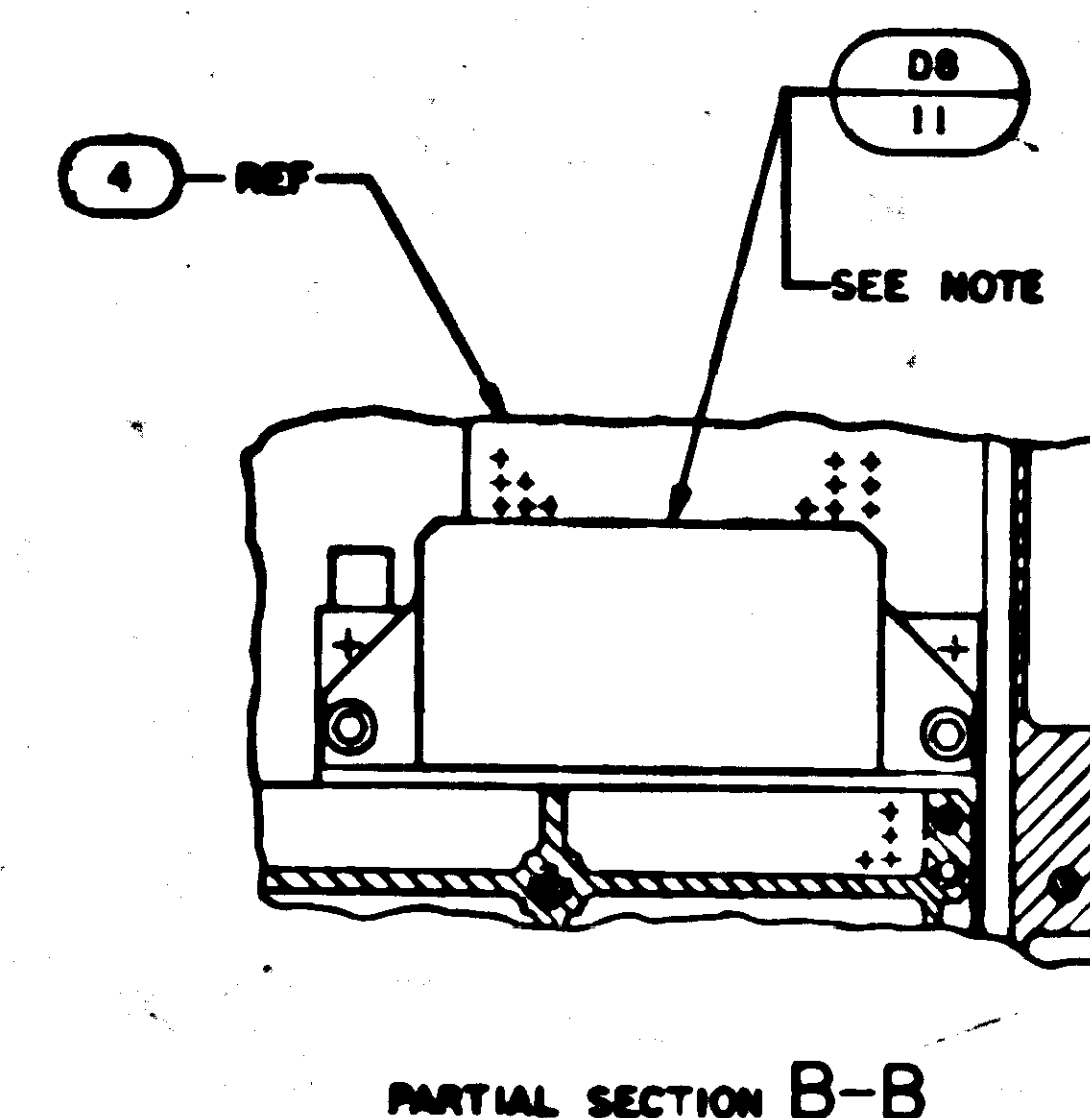
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		MTF INSTRUMENTATION LAB COLUMBIA		MANNED SPACECRAFT CENTER HOUSTON TEXAS	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON		DECIMALS - FRACTIONS -		DATES - ORDERED -	
DO NOT SCALE THIS DRAWING MATERIAL		CHECKED - APPROVED - APPROVED -		AGC DSKY ASSEMBLY	
HEAT TREATMENT		NASA APPROVAL		CODE IDENT NO SIZE 80230 J	
NEXT REV DRAWN ON		PRICE PER UNIT		NASA DRAWING NO 2003985	



- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
 2. MARK 10/08 HIGH WHITE CHARACTERS PER NDIO02019 AND NDIO02122, TYPE II, CLASS 2
 3. AND SERIALIZE PER NDIO02023 USING INK 1006271-I
 3. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 TO BE 7-10 INCH POUNDS
 4. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9, 10 & 38 TO BE 15-19 INCH POUNDS
 5. APPLY SEALING COMPOUND MIL-S-22473 GRADE H TO FIND NO. 17
 - ~~6. BOND FIND NO. 12, 13 TO FIND NO. 34, FIND NO. 14 TO FIND NO. 3, FIND NO. 31, 36, 39 TO FIND NO. 9~~
 - ~~7. FIND NO. 30 TO FIND NO. 10, FIND NO. 31, 32 TO FIND NO. 5, FIND NO. 33 TO FIND NO. 11 PER NDIO02023~~
 7. STAMP CHARACTERS PER NDIO02019 AND SERIALIZE PER NDIO02023
 8. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM OF 4.3% AIR TO 105/110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
 9. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS OF PS2003985
 10. APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 9, 10 & 38
DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4.
 11. AR DENOTES AS REQUIRED
 12. MOUNTING TORQUE FOR FIND NO. 16 AND 37 TO BE 8-9 INCH POUNDS
 12. MOUNTING TORQUE FOR FIND NO. 18 AND 26 TO BE 3.5 - 4.5 INCH POUNDS
 13. FIND NO. 2 AND 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 4, 36 OR 36
USING FIND NO. 19, BEFORE INSTALLING FIND NO. 37

						2003954	OUTLINE DRAWING
						2003957	SIGNAL PIN ASSIGNMENT
						2003951	INTERCONNECTING DIAGRAM
						2003950	SIGNAL FLOW DIAGRAM
	6	6	-	-	-	2003952-011	INDICATOR DRIVER MODULE DI-D6
	6	6	6	6	6	M516995-20	SCREW, CAP, SOCKET HEAD
						2003903-031	FRONT HOUSING ASSY
	1	-	-	-	-	2003903-021	FRONT HOUSING ASSY
AR	AR	AR	AR	AR		006879	SILICONE COMPOUND
						2004935-008	GASKET
						2004935-008	GASKET
						2004935-007	GASKET
						2004935-006	GASKET
						2004935-005	GASKET
						2004935-004	GASKET
						2004935-003	GASKET
						2004935-002	GASKET
						2004935-001	GASKET
13	13	13	13	13	13	M516995-104	SCREW, HEX SOCKET HEAD
13	13	13	13	13		NAS520C4	WASHER, FLAT
						2004958	BACKET, MODULE
	1	1	1	1	1	2004955	BACKET, MODULE
46	46	46	46	46	46	NAS520C6	WASHER, FLAT
18	18	18	18	18	18	I004546-4	WASHER, FLAT
6	6	6	6	6	6	M516633-4014	RING, RETAINING
6	6	6	6	6	6	2004932-001	SCREW, JACKING
8	8	8	8	8	8	I004189-59	SCREW, SOCKET HEAD
4	4	4	4	4	4	M515216-1	SCREW, PAN HEAD, CROSS RECESSED
32	32	32	32	32	32	M516995-18	SCREW, CAP, SOCKET HEAD
1	1	1	1	1	1	I004260-20	NAMEPLATE
						2004955-001	GASKET
						2004935-001	GASKET
						2004935-001	GASKET
						2003909-011	KEYBOARD MODULE ASSY D8
	1	1	1	1	1	2003901-011	POWER SUPPLY ASSY MODULE D7
-	-	6	6	6	6	2003902-011	INDICATOR DRIVER MODULE DI-D6
	1	1	1	1	1	I006349	GASKET, BONDED, RUBBER
						0061300	GASKET, BONDED, RUBBER
	1	1	1	1	1	2004900	COVER, REAR
	1	1	1	1	1	2003954-011	MAIN HOUSING ASSY
-	-	-	-	-	-	2003903-011	FRONT HOUSING ASSY
	1	1	1	1	1	2004935	INDICATOR, DIGITAL
	1	1	1	1	1	I006316	INDICATOR, ALARM
	1	1	1	1	1	2004928-011	COVER, FRONT

[051] [041] [031] [021]		[011]		M I V		LIST OF MATERIALS	
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS DECIMALS ANGLES ±.02		INSTRUMENTATION LAB Customer Name REV 30		COMPONENT		MANNED SPACECRAFT CENTER Mission: LEAS	
DO NOT SCALE THIS DRAWING MATERIAL		DRAWN: <i>A. Vance</i> DATE: <i>06-05-85</i> CHECKED: <i>Robert J. Smith</i> APPROVAL: <i>Robert J. Smith</i> 10/16/85 APPROVAL: <i>Robert J. Smith</i> 10/16/85		AGC DSKY ASSEMBLY		CODE IDENT NO SIZE 8023031 J SCALE 1/3 W REV APPROVAL: <i>W. Vance</i> 10/16/85 INSET 1 2	
NEXT SHEET USED ON PAGE THREE		NADA APPROVAL: <i>Robert J. Smith</i>					



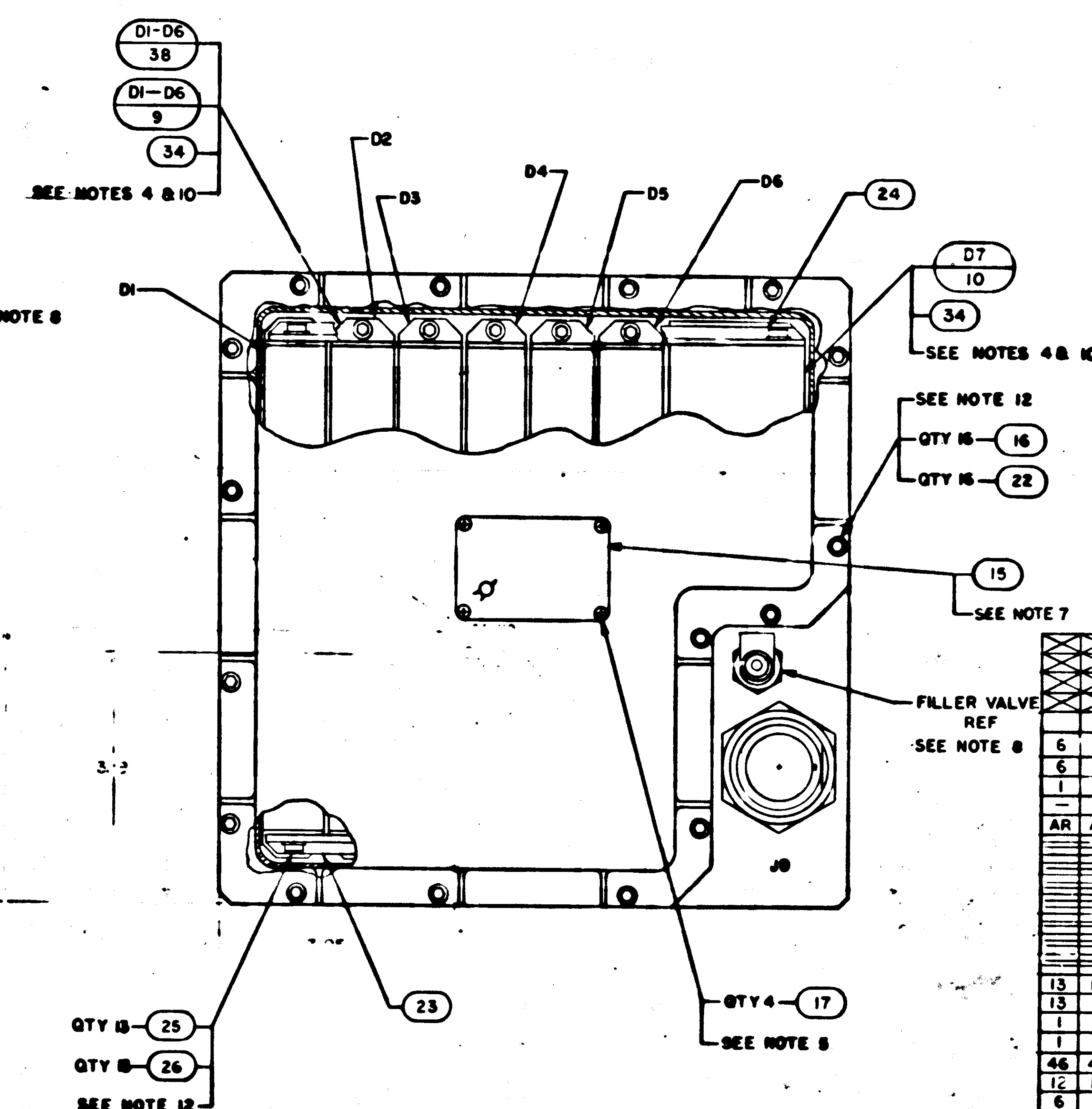
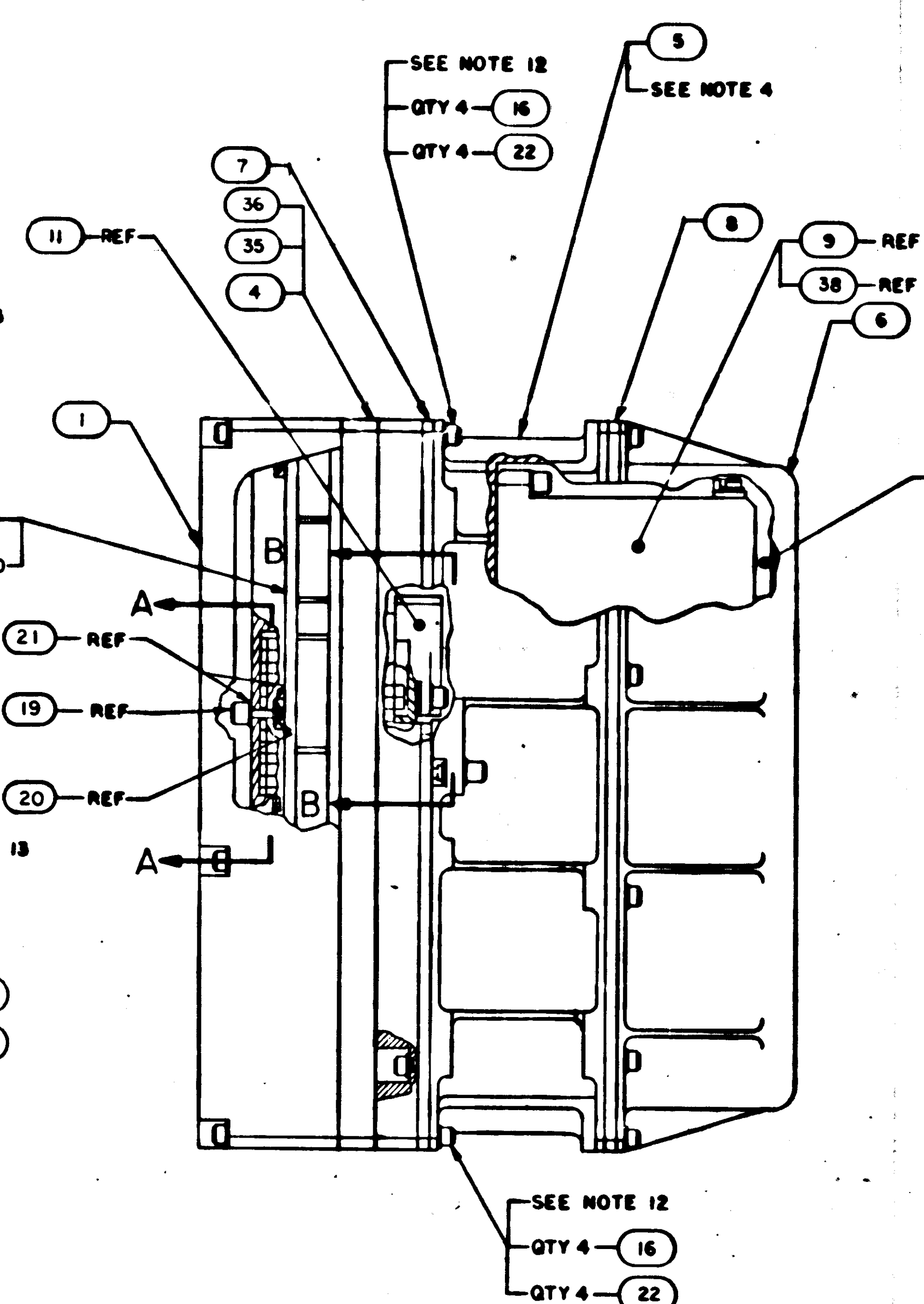
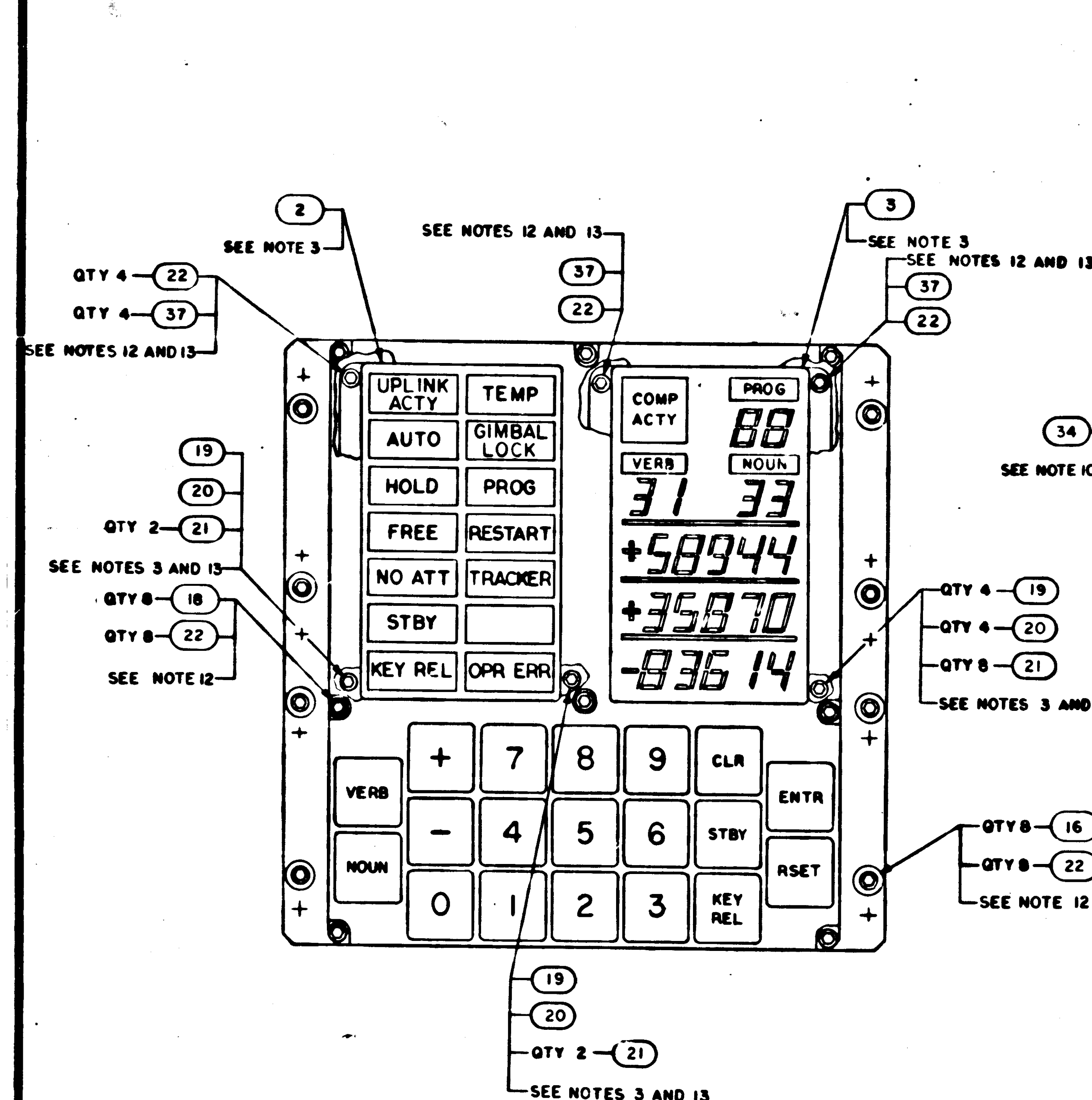
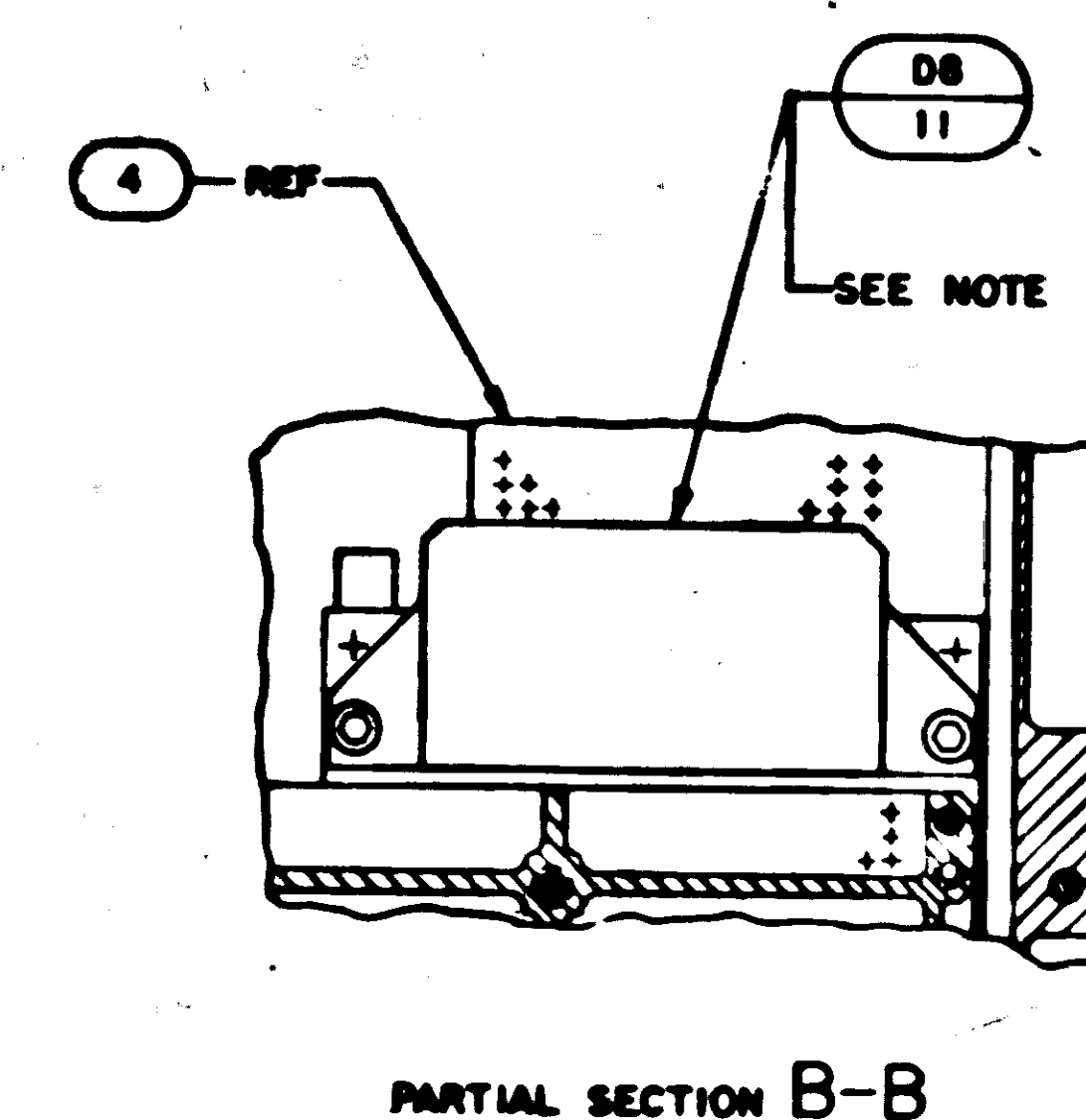
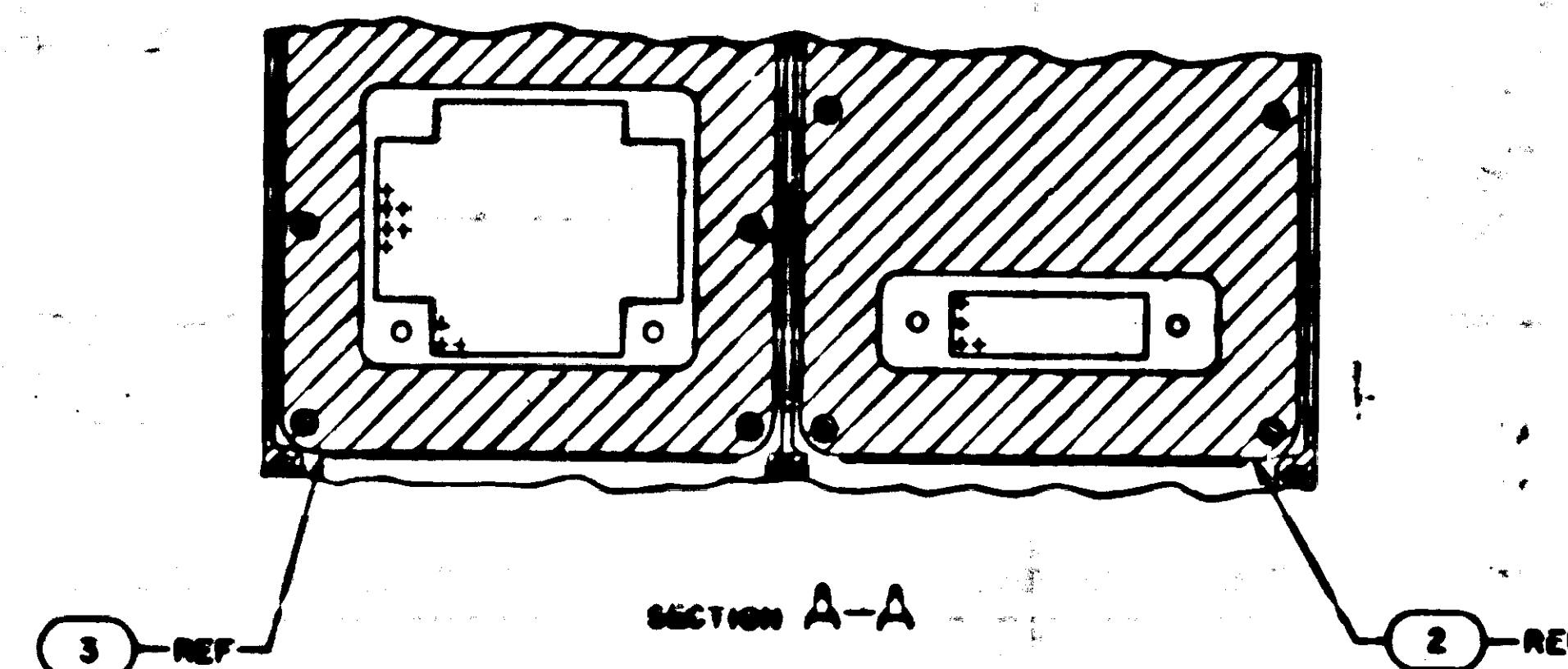
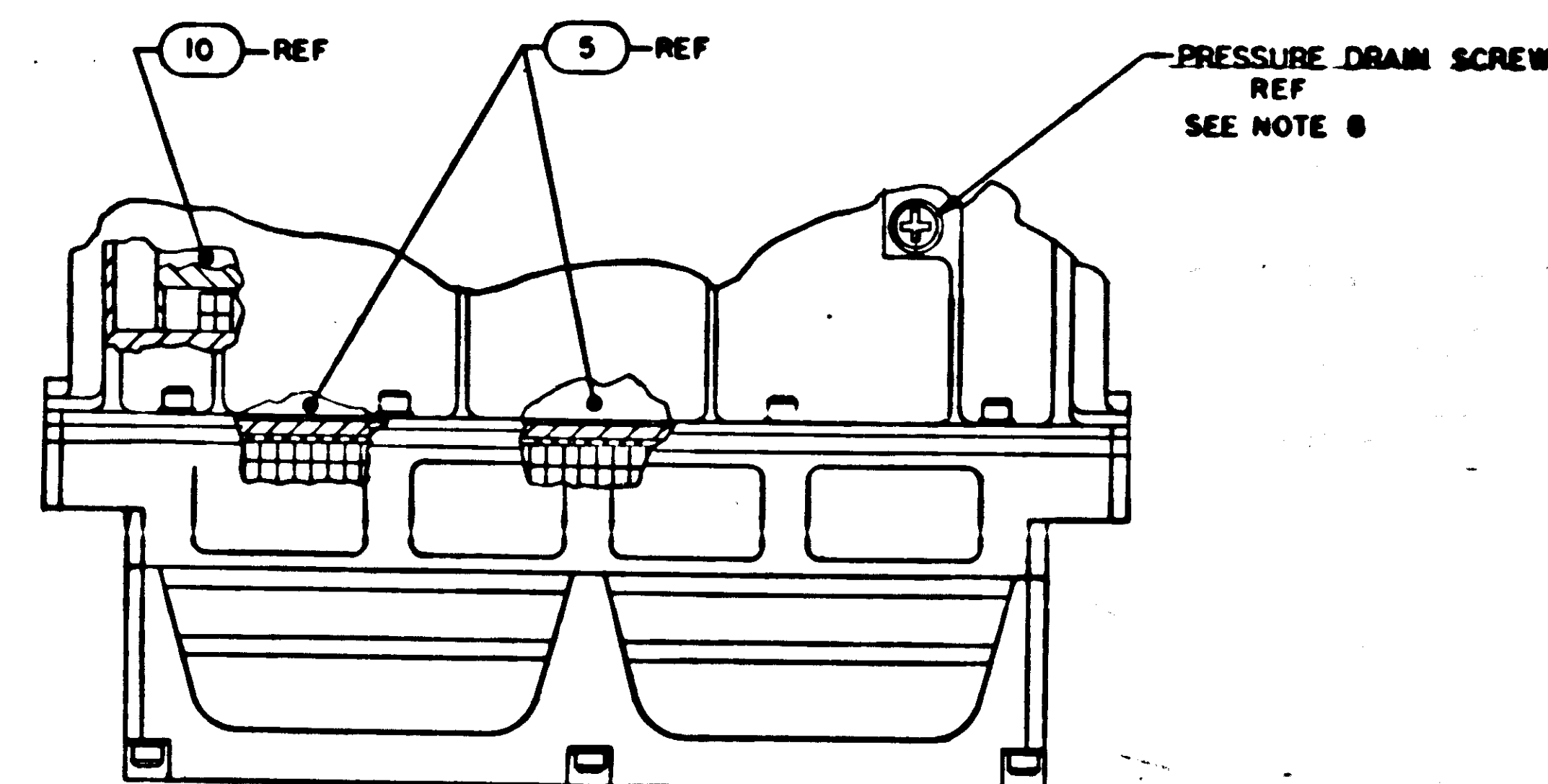
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
~~2. MARK 10/16 INK WHITE CHARACTERS PER NO100308 AND NO100312, 7-28-62, 3-2-62~~
~~AND SERIALIZE PER NO100303 USING INK NO104271~~
3. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO.11 TO BE 7-10 INCH POUNDS
4. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO.5,9,10,38 TO BE 15-18 INCH POUNDS
5. APPLY SEALING COMPOUND MIL-S-22473 GRADE H TO FIND NO.17
~~6. BOND FIND NO.15,19 TO FIND NO.3, FIND NO.4 TO FIND NO.3, FIND NO.27,30,29 TO FIND NO.6~~
~~FIND NO.10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33 TO FIND NO.5, FIND NO.38 TO FIND NO.11 PER NO100338~~
7. MARK "AGC DSKY ASSEMBLY AND ITS RESPECTIVE PART NO., SERIAL NO. AND CONTRACT NO.
MARKING TO BE NO100201 AND SERIALIZE PER NO100203
8. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM
OF 4.3% AIR TO 105/110 ATMOSPHERES, DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
9. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL
THE REQUIREMENTS OF P52003985
10. APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 9, 10, & 38
DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4
11. AR DENOTES AS REQUIRED
12. MOUNTING TORQUE FOR FIND NO. 16 AND 37 TO BE 8-9 INCH POUNDS
MOUNTING TORQUE FOR FIND NO. 18 AND 26 TO BE 3.5-4.5 INCH POUNDS
13. FIND NO. 2 AND 3 TO BE ASSEMBLE TO HEIGHT OF BONDED RUBBER OF FIND
NO. 4, 35 OR 36 USING FIND NO. 18, BEFORE INSTALLING FIND NO. 37

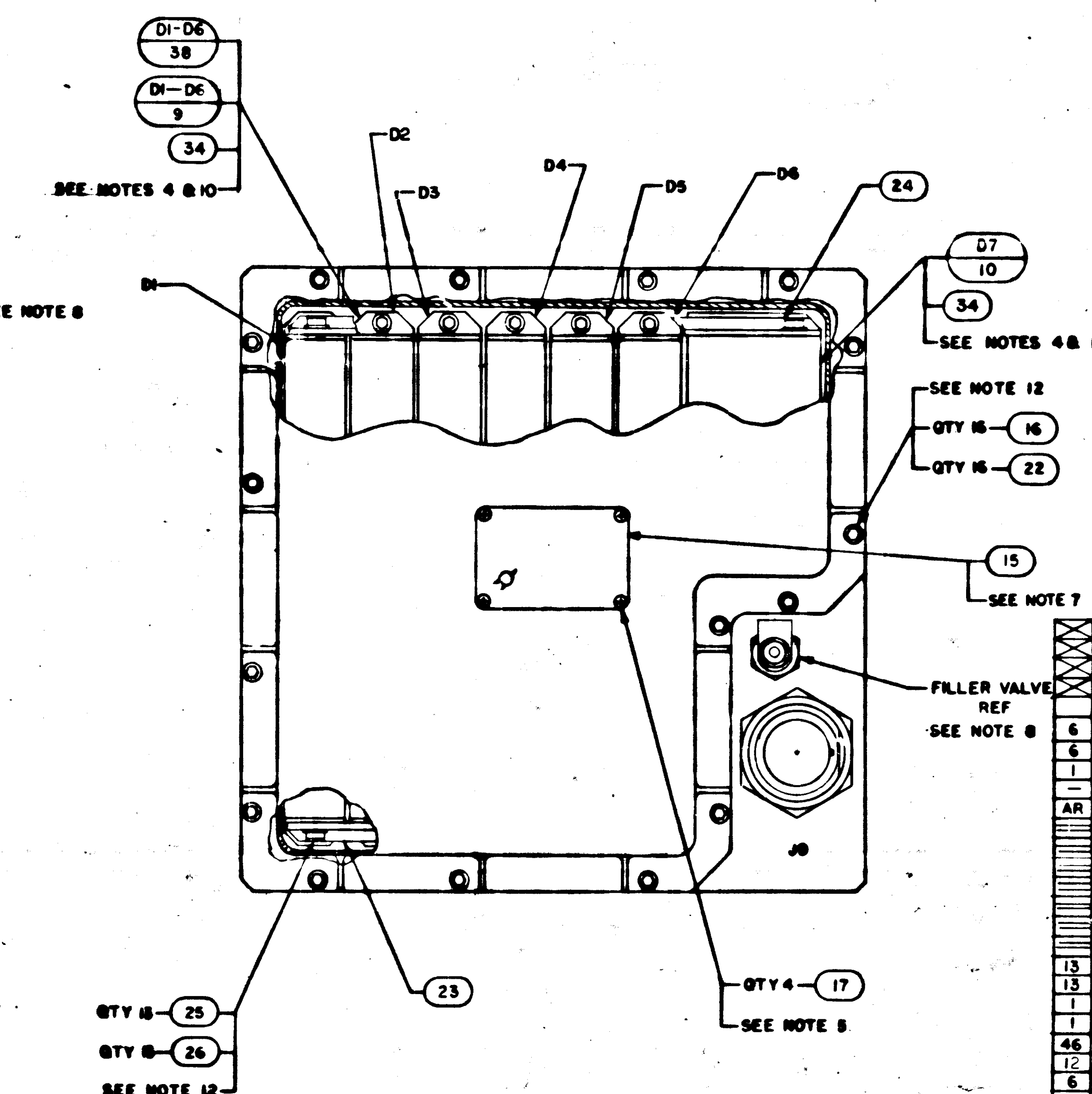
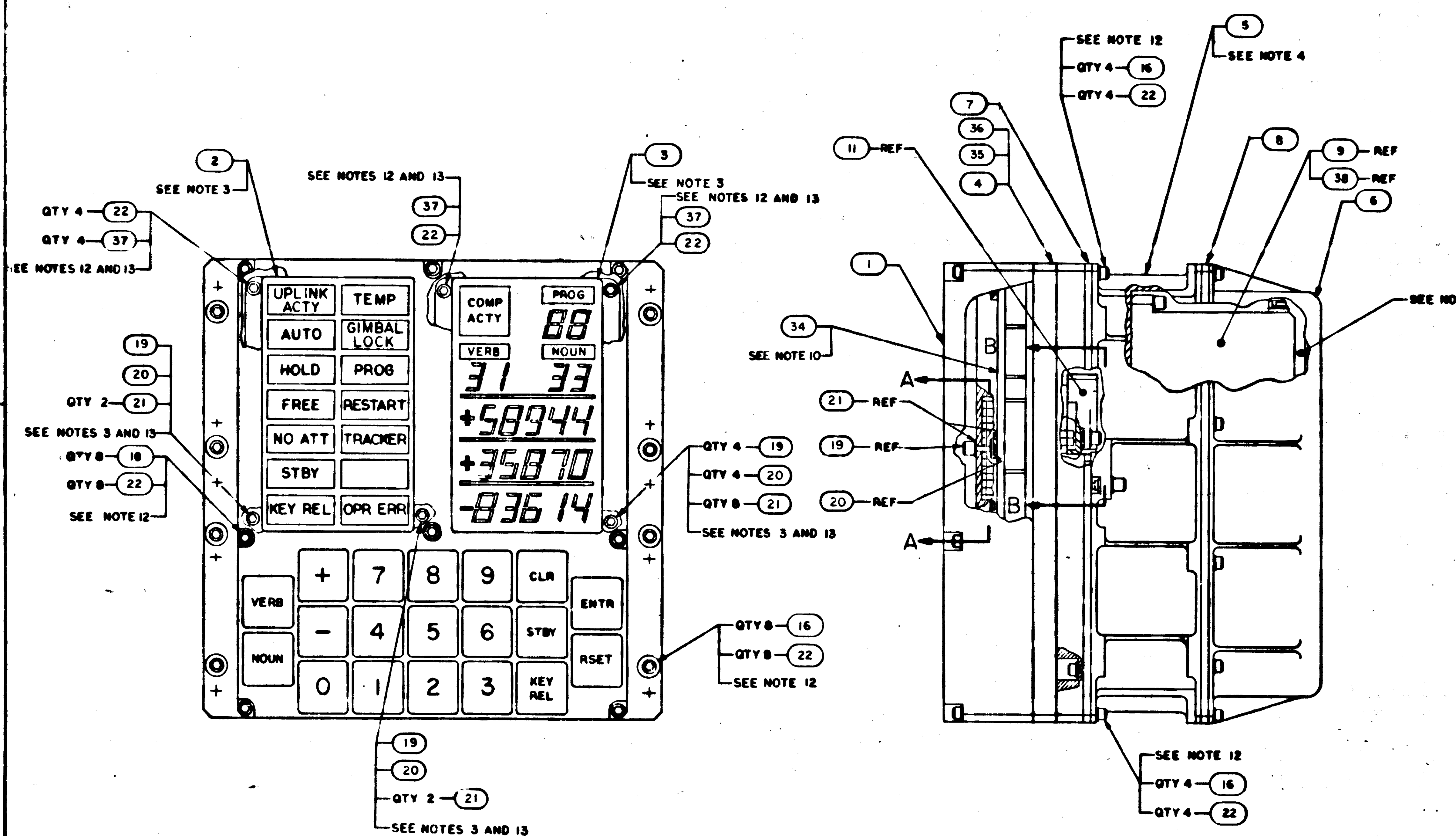
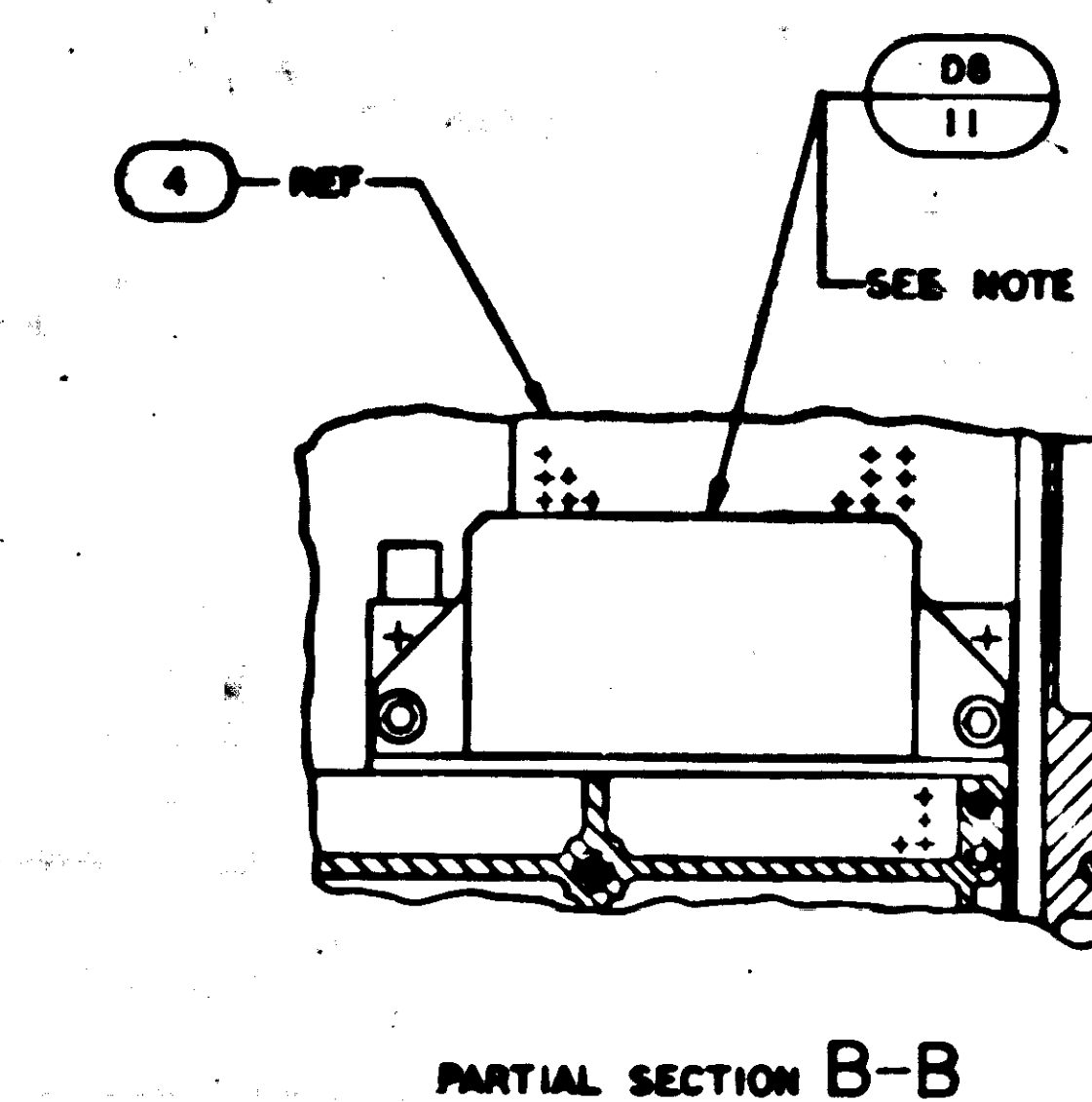
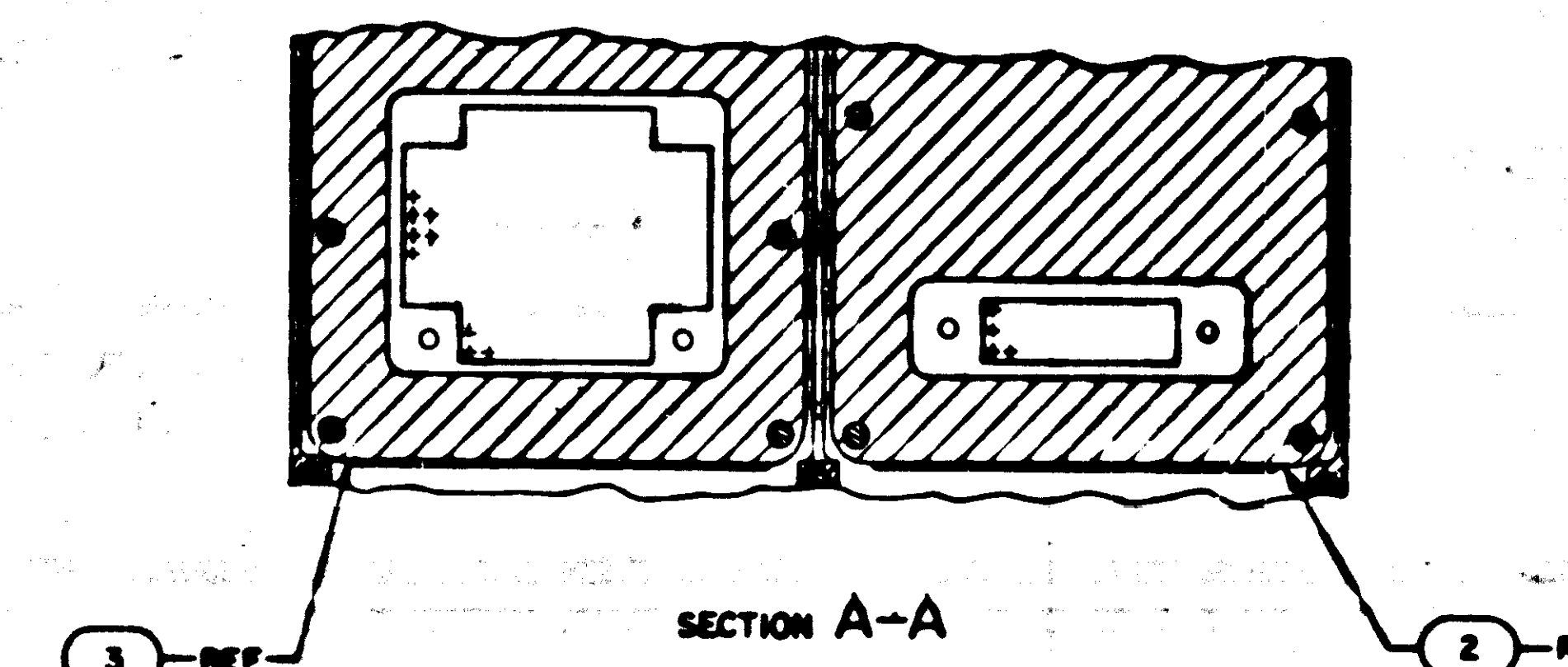
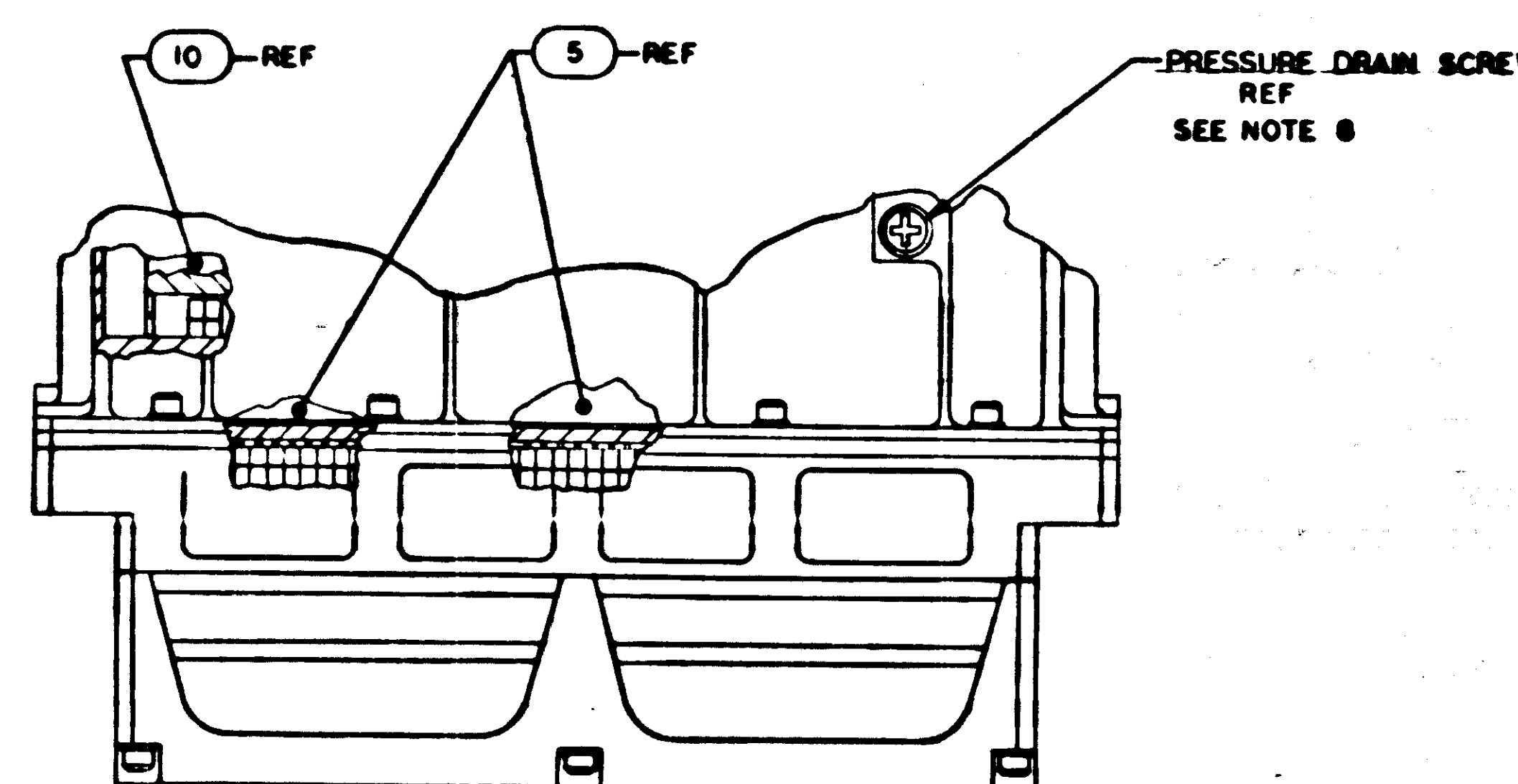
						2003956	OUTLINE DRAWING	RE
						2003957	SIGNAL PIN ASSIGNMENT	NE
						2003951	INTERCONNECTING DIAGRAM	RE
						2003950	SIGNAL FLOW DIAGRAM	RE
6	6	—	—	—	—	203952-01	INDICATOR DRIVER MODULE DI-D6	34
6	6	6	6	6	6	MS1699F-20	SCREW, CAP, SOCKET HEAD	3
1	1	—	—	—	—	200390J-031	FRONT HOUSING ASSY	3
						200390J-021	FRONT HOUSING ASSY	34
AR	AR	AR	AR	AR	AR	1006373	SILICONE COMPOUND	3
						2003938-008	GASKET	16
						2003938-008	GASKET	16
						2003938-008	GASKET	16
						2003938-008	GASKET	16
						2003938-008	GASKET	16
						2003938-008	GASKET	16
						2003938-008	GASKET	16
13	13	13	13	13	13	MS1692-10	SCREW, HEX, SOCKET HEAD	2
13	13	13	13	13	13	MS1620C-4	WASHER, FLAT	2
1	1	1	1	1	1	2004958	BRACKET, MODULE	24
1	1	1	1	1	1	2004959	BRACKET, MODULE	22
46	46	46	46	46	46	MS1620C-6	WASHER, FLAT	23
12	12	12	12	12	12	1004456-4	WASHER, FLAT	21
6	6	6	6	6	6	MS1633-4014	RING, RETAINING	20
6	6	6	6	6	6	2004932-001	SCREW, JACKING	17
8	8	8	8	8	8	1001489-58	SCREW, HEX, SOCKET HEAD	16
4	4	4	4	4	4	MS15216-1	SCREW, PAN HEAD, CROSS RECESSED	17
32	32	32	32	32	32	MS16995-16	SCREW, CAP, SOCKET HEAD	16
1	1	1	1	1	1	1004260-20	NAMEPLATE	16
						2004933-008	GASKET	16
						2004933-008	GASKET	16
						2004933-008	GASKET	16
1	1	1	1	1	1	2003909-011	KEYBOARD MODULE ASSY D6	11
1	1	1	1	1	1	2003901-011	POWER SUPPLY ASSY MODULE D7	10
—	—	6	6	6	6	2003902-011	INDICATOR DRIVER MODULE DI-D6	9
1	1	1	1	1	1	1006349	GASKET, BONDED, RUBBER	8
1	1	1	1	1	1	1006350	GASKET, BONDED, RUBBER	7
1	1	1	1	1	1	2004900	COVER, REAR	6
—	—	—	—	—	—	2003954-011	MID HOUSING ASSY	5
—	—	—	—	—	—	2003903-011	FRONT HOUSING ASSY	4
1	1	1	1	1	1	2004935	INDICATOR, DIGITAL	3
1	1	1	1	1	1	1006316	INDICATOR, ALARM	2
1	1	1	1	1	1	2004929-011	COVER, FRONT	1
QTY	QTY	QTY	QTY	QTY	QTY	PART OR	NOMENCLATURE OF	PART NO
REMARK	REMARK	REMARK	REMARK	REMARK	REMARK	DESCRIPTION	DESCRIPTION	
QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	DESCRIPTION	
QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	DESCRIPTION	

[05] [04] [03] [02] [01]		LIST OF MATERIALS	
ORLES OVERSIZE DRILLED DIMENSIONS ARE IN INCHES UNLESS NOTED		DIV INSTRUMENTATION LAB CAMBING TOWN TEL NO. (0612) 741-1111	
DRAWING NO. 202 ORIGINALS NO NOT SCALE THIS DRAWING MATERIAL		MANNED SPACECRAFT CENTER HUNTSVILLE, TENN.	
MEAT TREATMENT NEXT ASSY USED ON APPLICATION		AGC DSKY ASSEMBLY NASA APPROVAL <i>[Signature]</i> CODE IDENT NO. 80230 SIZE J SCALE 1/2 DATE APPROVAL <i>[Signature]</i> NASA DRAWING NO. 2003985 SHEET 1 OF 1	

2003985 F

REV	DESCRIPTION	DATE	BY	CHK
A	REVISED PER TORR 22462 DR. PUNCH. APPD. DR.	11/11/64	W. H. H.	W. H. H.
B	REVISED PER TORR 23637 DR. PUNCH. APPD. DR.	11/11/64	W. H. H.	W. H. H.
C	REVISED PER TORR 24218 DR. PUNCH. APPD. DR.	11/11/64	W. H. H.	W. H. H.
D	REVISED PER TORR 24667 DR. PUNCH. APPD. DR.	11/11/64	W. H. H.	W. H. H.
E	REVISED PER TORR 25150 DR. PUNCH. APPD. DR.	11/11/64	W. H. H.	W. H. H.
F	REVISED PER TORR 25771 DR. PUNCH. APPD. DR.	11/11/64	W. H. H.	W. H. H.

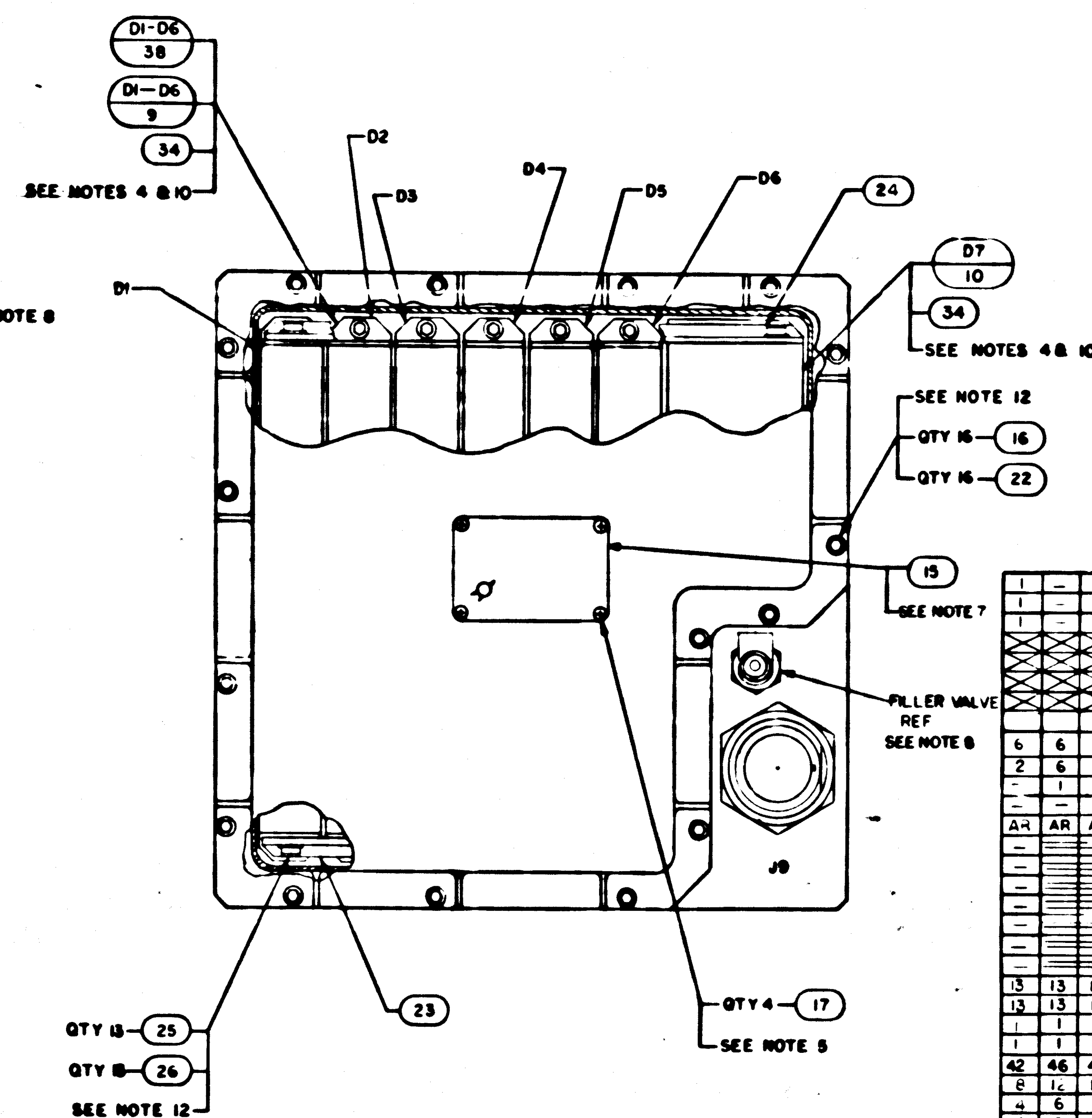
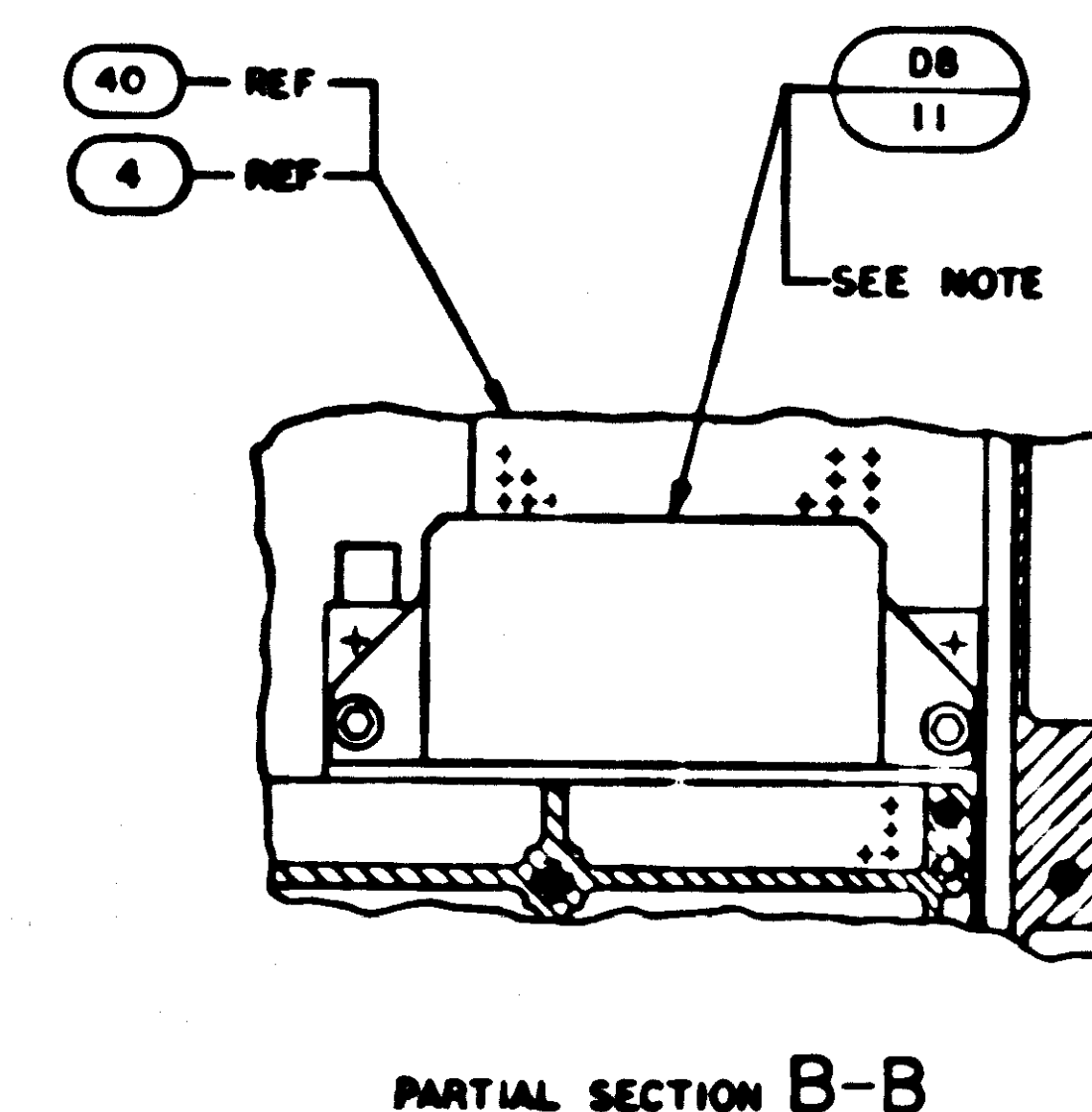
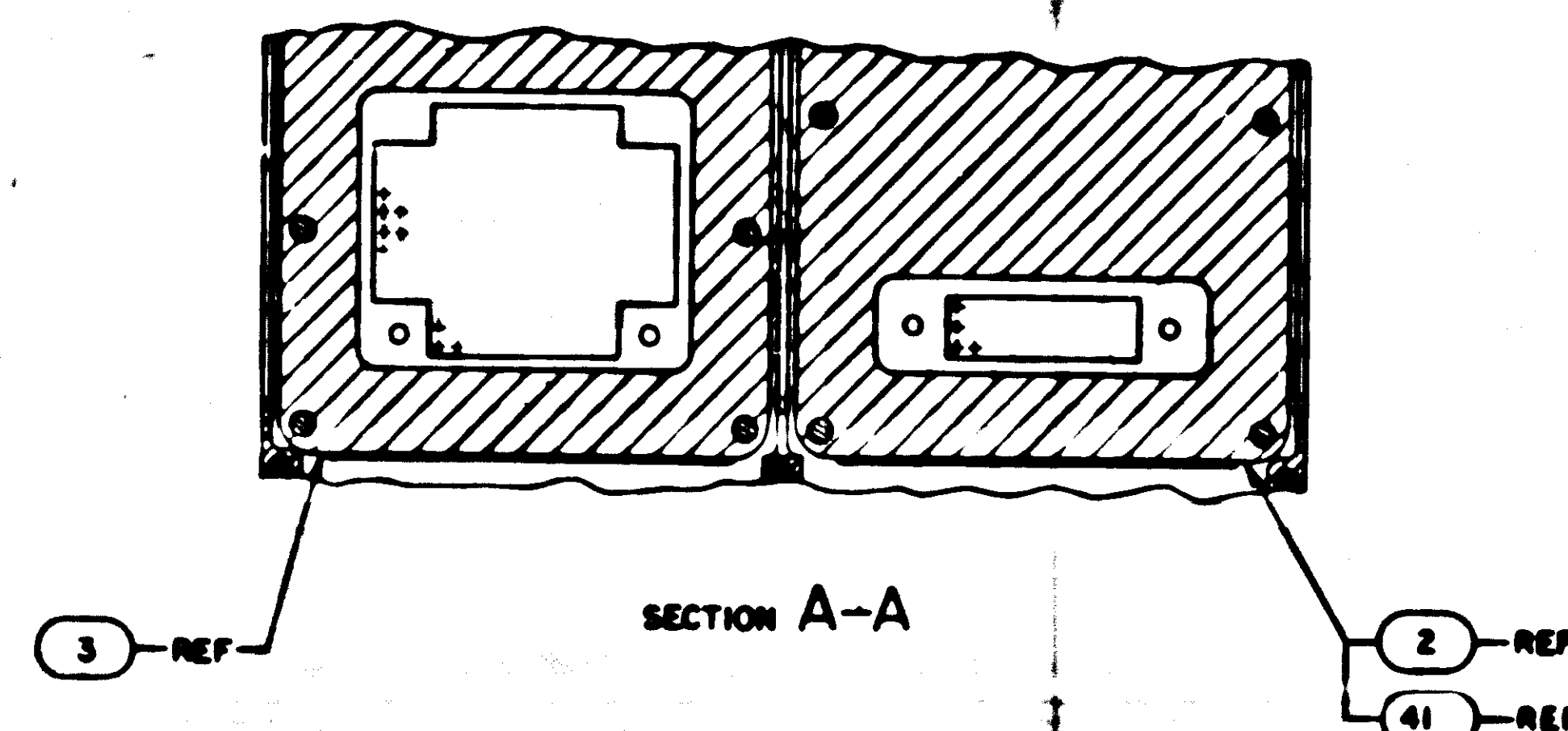




- NOTES
1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
~~MARK NO. 00100203 SERIAL NO. 00100203 PART NO. 00100203~~
~~AND SERIALIZE PER NO. 00100203 USING INK 0042~~
2. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 TO BE 8.5-9.5 INCH POUNDS
3. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9, 10, 38 TO BE 15-19 INCH POUNDS
4. APPLY SEALING COMPOUND MIL-S-22473 GRADE M TO FIND NO. 17
- ~~5. FILL FIND NO. 15, 30 TO FIND NO. 33, FIND NO. 34 TO FIND NO. 35, FIND NO. 37, 38, 39 TO FIND NO. 40~~
~~AND FIND NO. 30 TO FIND NO. 33, FIND NO. 34 TO FIND NO. 35, FIND NO. 37 TO FIND NO. 38, 39 TO FIND NO. 40~~
7. MARK "AGC DSKY ASSEMBLY" AND ITS RESPECTIVE PART NO., SERIAL NO. AND CONTRACT NO.
MARKING TO BE PER NO. 01002019 AND SERIALIZE PER NO. 01002023
8. FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM
OF 4.3% AIR TO 105/110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
9. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL
THE REQUIREMENTS OF RS2003985
10. APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 8, 10, & 38
DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4
11. AR DENOTES AS REQUIRED
12. MOUNTING TORQUE FOR FIND NO. 16, 19, 37 TO BE 8-9 INCH POUNDS
13. MOUNTING TORQUE FOR FIND NO. 26 TO BE 35-45 INCH POUNDS
15. FIND NO. 2 AND 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND
NO. 4, 35 OR 36 USING FIND NO. 19. BEFORE INSTALLING FIND NO. 37

					2003956	OUTLINE DRAWINGS	REF
					2003957	SIGNAL PIN ASSIGNMENT	REF
					2003951	INTERCONNECTING DIAGRAM	REF
					2003950	SIGNAL FLOW DIAGRAM	REF
	6	6	-	-	2003952-01	INDICATOR DRIVER MODULE DI-D6	38
	6	6	6	6	MS16995-20	SCREW, CAP. SOCKET HEAD	37
	I	-	I	-	2003903-031	FRONT HOUSING ASSY	36
	I	-	I	-	2003903-021	FRONT HOUSING ASSY	35
AR	AR	AR	AR	AR	1006879	SILICONE COMPOUND	34
	-	-	-	-	2004455-008	GASKET	28
	-	-	-	-	2004455-008	GASKET	28
	-	-	-	-	2004455-007	GASKET	31
	-	-	-	-	2004455-006	GASKET	29
	-	-	-	-	2004455-008	GASKET	29
	-	-	-	-	2004988-002	GASKET	28
	-	-	-	-	2004988-008	GASKET	28
	13	13	13	13	MS16922-10	SCREW, HEX SOCKET HEAD	25
	13	13	13	13	NA562004-C	WASHER, FLAT	26
	I	I	I	I	2004A58	BRACKET, MODULE	24
	I	I	I	I	2004A59	BRACKET, MODULE	23
46	46	46	46	46	NA56200C	WASHER, FLAT	22
12	12	12	12	12	1004546-4	WASHER, FLAT	21
6	6	6	6	6	MS56633-4014	RING, RETAINING	20
6	6	6	6	6	2004A982-001	SCREW, JACKING	19
8	8	8	8	8	ID01A89-58	SCREW, HEX SOCKET HEAD	17
4	4	4	4	4	MS55216-1	SCREW PAN HEAD, CROSS RECESSED	17
32	32	32	32	32	MS16995-H	SCREW, CAP. SOCKET HEAD	16
I	I	I	I	I	1004260-20	NAMER PLATE	15
I	I	I	I	I	2004A935-001	GASKET	18
I	I	I	I	I	2004A935-006	GASKET	18
I	I	I	I	I	2004A935-006	GASKET	18
I	I	I	I	I	2003909-011	KEYBOARD MODULE ASSY D8	11
I	I	I	I	I	2003901-011	POWER SUPPLY ASSY MODULE D7	10
I	-	6	6	6	2003902-011	INDICATOR DRIVER MODULE DI-D6	9
I	I	I	I	I	1006349	GASKET, BONDED, RUBBER	8
I	I	I	I	I	1006350	GASKET, BONDED, RUBBER	7
I	I	I	I	I	2004A900	COVER, REAR	6
I	I	I	I	I	2003A94-C	MAIN HOUSING ASSY	5
I	-	-	-	-	2003903-Q11	FRONT HOUSING ASSY	4
I	I	I	I	I	1006515	INDICATOR, DIGITAL	3
I	I	I	I	I	1006316	INDICATOR, ALARM	2
I	I	I	I	I	2004929-011	COVER, FRONT	1
QTY REQD	QTY REQD	QTY REQD	QTY REQD	QTY REQD	PART OR IDENTIFYING NO.	NONEXHAUSTIVE MP DESCRIPTION	PRG NO.

[081][047][031][021]		G11		LIBRARY OF MATERIALS	
UNCLASSIFIED DISSEMINATION AND USE INSTRUCTIONS TOLERANCES OR FINISHES DIMENSIONS DO NOT SCALE THIS DRAWING MATERIAL HEAT TREATMENT PART NAME PART NUMBER APPLICATION		INSTRUMENTATION LAB CUSTOMER NAME DATE DRAWING NO. <i>2003985</i> CHECKED <i>[Signature]</i> APPROVED <i>[Signature]</i> NADA APPROVAL <i>[Signature]</i> SET APPROVAL <i>[Signature]</i>		MANNEK SPACECRAFT CENTER HOUSTON, TEXAS AGC DSKY ASSEMBLY CODE IDENT NO 80230 SIZE J NADA DRAWING NO 2003985 SCALE 1:1	



1	—	—	—	2003903-04	INDICATOR ALARM & COVER ASSY	4
1	—	—	—	2003903-04	FRONT HOUSING ASSY	4
1	—	—	—	2004739	COVER, FRONT	4
1	—	—	—	2003956	CUTLINE DRAWING	4
1	—	—	—	2005957	SIGNAL PIN ASSIGNMENT	4
1	—	—	—	2005951	INTERCONNECTING DIAGRAM	4
1	—	—	—	2003950	SIGNAL FLOW DIAGRAM	4
6	6	6	—	2003952-011	INDICATOR DRIVER MODULE DI-D6	6
2	6	6	6	MS16995-20	SCREW, CAP, SOCKET HEAD	6
1	—	—	—	2003903-031	FRONT HOUSING ASSY	6
1	—	—	—	2003903-021	FRONT HOUSING ASSY	6
AR	AR	AR	AR	006879	SILICONE COMPOUND	6
—	—	—	—	2004955-0008	GASKET	6
—	—	—	—	2004958-0008	GASKET	6
—	—	—	—	2004958-0007	GASKET	6
—	—	—	—	2004958-0006	GASKET	6
—	—	—	—	2004958-0005	GASKET	6
—	—	—	—	2004958-0003	GASKET	6
—	—	—	—	2004958-0004	GASKET	6
13	13	13	13	MS16955-10	SCREW, HEX SOCKET HEAD	13
13	13	13	13	NA56200C4	WASHER, FLAT	13
1	1	1	1	2004958	BRACKET, MODULE	13
1	1	1	1	2004958	BRACKET, MODULE	13
42	46	46	46	NA56200C6	WASHER, FLAT	42
8	16	12	12	1004546-4	WASHER, FLAT	42
4	6	6	6	MS16633-4014	RING, RETAINING	42
4	6	6	6	2004982-01	SCREW, JACKING	42
2	8	8	8	1004189-59	SCREW, HEX SOCKET HEAD	42
4	4	4	4	MS3576-11	SCREW, PAN HEAD, DEEP RECESSED	42
32	32	32	32	MS16995-18	SCREW, CAP, SOCKET HEAD	32
1	1	1	1	1004260-70	NUT, PLATE	32
—	—	—	—	2004955-0001	GASKET	32
—	—	—	—	2004955-0002	GASKET	32
—	—	—	—	2004955-0003	GASKET	32
1	1	1	1	2003909-011	KEY BOARD MODULE ASSY D8	32
1	1	1	1	2003909-011	KEY BOARD MODULE ASSY D8	32
—	—	6	6	2003902-011	POWER SUPPLY ASSY MODULE D7	32
1	1	1	1	1006349	INDICATOR DRIVER MODULE DI-D6	32
1	1	1	1	1006350	GASKET, BONDED, RUBBER	32
1	1	1	1	1006490	GASKET, BONDED, RUBBER	32
1	1	1	1	2004950	COVER, REAR	32
1	1	1	1	2003954-011	FRONT HOUSING ASSY	32
—	—	—	—	2003903-011	FRONT HOUSING ASSY	32
1	1	1	1	1006315	INDICATOR, DIGITAL	32
—	—	—	—	1006316	INDICATOR, ALARM	32
—	—	—	—	2004929-011	COVER, FRONT	32
QTY	QTY	QTY	QTY	PART OR	DESCRIPTION	QTY
INCREASED	INCREASED	INCREASED	INCREASED	REPLACING	DESCRIPTION	INCREASED
QTY	QTY	QTY	QTY	QTY	QTY	QTY
QTY	QTY	QTY	QTY	QTY	QTY	QTY

1. INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327

~~2. MARK 10, 40, NO. WHITE CHARACTERS PER ND100203, PER ND100203, 7, 5, 8, 4, 3~~
~~AND SERIALIZE PER ND100203 USING INK 10042712~~

3. MOUNTING TORQUE FOR FIND NO. 19 AND JACK SCREWS OF FIND NO. 11 AND 11A TO BE 85-95 INCH POUNDS

4. MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 9, 30 AND 38 TO BE 18-19 INCH POUNDS

5. APPLY SEALING COMPOUND MIL-S-22473 GRADE H TO FIND NO. 17

~~6. BOND FIND NO. 12, 13 TO FIND NO. 3, FIND NO. 14 TO FIND NO. 5, FIND NO. 27, 28, 29 TO FIND NO. 9,~~
~~FIND NO. 30 TO FIND NO. 3, FIND NO. 32 TO FIND NO. 5, FIND NO. 35, FIND NO. 39 TO FIND NO. 11, PER ND100232~~

7. MARK "CC DSKY ASSEMBLY" AND ITS RESPECTIVE PART NO., SERIAL NO. AND CONTRACT NO.
MARKING TO BE ON FIND 100201B AND SERIALIZE PER ND100203

8. FILL WITH A MINIMUM OF 87% NITROGEN AND 8-7% HELIUM AND A MAXIMUM
OF 4.3% AIR TO 105/110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PURGIZATION

9. COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL
THE REQUIREMENTS OF PS2003985

10. APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 9, 10, 36, 35, 36, & 40
DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4, 35, 36, OR 40

11. AR DENOTES AS REQUIRED

12. MOUNTING TORQUE FOR FIND NO. 16, 18 & 37 TO BE 8-9 INCH POUNDS
MOUNTING TORQUE FOR FIND NO. 26 TO BE 35-45 INCH POUNDS

13. FIND NO. 2 AND 3 TO BE ASSEMBLE TO HEIGHT OF BONDED RUBBER OF FIND
NO. 4, 35 OR 36 USING FIND NO. 19, BEFORE INSTALLING FIND NO. 37

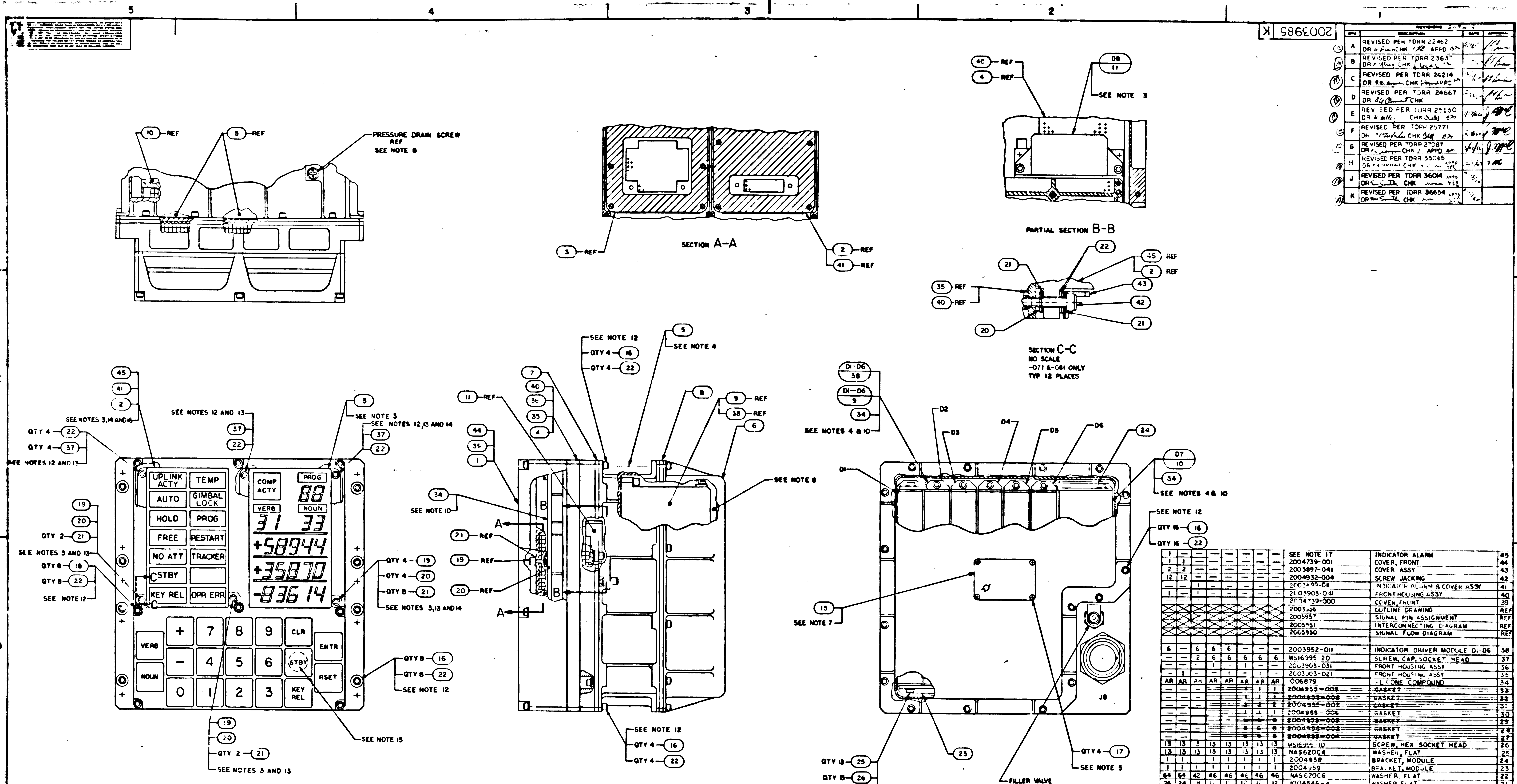
14. FIND NO. 1 TO BE ASSEMBLE TO HEIGHT OF BONDED RUBBER OF FIND NO. 40 USING FIND NO. 19 BEFORE INSTALLING
FIND NO. 37. FIND NO. 41 TO BE INSTALLED USING EXISTING JACKING SCREWS. ASSEMBLE IN AN ENVIRONMENT HAVING
A TEMPERATURE OF 72°± 5° AND A RELATIVE HUMIDITY OF 50% OR LESS.

15. THE -01, -02, -03, -04 & -05 CONFIGURATIONS SHALL REFLECT A NOMENCLATURE AS SHOWN THE -061 CONFIGURATION
SHALL REFLECT THE KEY POSITION INDICATED.

16. PICTORIAL SHOWN IS FOR THE -01 THRU -051 CONFIGURATIONS. THE -061 CONFIGURATION SHALL EXHIBIT ONLY TEN ALARM
LEGENDS ON FIND NO. 41.

-061	1 THRU 12, 14 THRU 16
-051	1 THRU 13 AND 15
-041	1 THRU 13 AND 15
-031	1 THRU 13 AND 15
-021	1 THRU 13 AND 15
-011	1 THRU 13 AND 15
DASH NO	APPLICABLE
NOTE: APPLICATION	

[illegible]



NOTES

- INTERPRET DRAWING IN ACCORDANCE WITH STANDARDS PRESCRIBED BY MIL-D-70327
- AND SERIALIZED PER ND1002019 AND SERIALIZE PER ND1002023
- MOUNTING TORQUE FOR FIND NO. 16 AND 37 TO BE 8-9 INCH POUNDS
- MOUNTING TORQUE FOR JACK SCREWS OF FIND NO. 5, 10, 33, 36 TO BE 15-19 INCH POUNDS
- APPLY SEALING COMPOUND PER 1008953-004 TO FIND NO. 17
- BOND FIND NO. 12, 13 TO FIND NO. 3, FIND NO. 14 TO FIND NO. 2, FIND NO. 17, 22, 23 TO FIND NO. 9
- FIND NO. 30 TO FIND NO. 10, FIND NO. 31, 32 TO FIND NO. 3, FIND NO. 33 TO FIND NO. 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45
- MARK AGC DSKY ASSEMBLY AND ITS RESPECTIVE PART NO., SERIAL NO. AND CONTRACT NO. MARKING TO BE PER ND1002019 AND SERIALIZE PER ND1002023
- FILL WITH A MINIMUM OF 87% NITROGEN AND 8.7% HELIUM AND A MAXIMUM OF 4.3% AIR TO 105/110 ATMOSPHERES. DO NOT EXCEED 2 ATMOSPHERES DURING PRESSURIZATION
- COMPLETED ASSEMBLY SHALL BE TESTED IN ACCORDANCE WITH AND SHALL MEET ALL THE REQUIREMENTS OF PS2003985
- APPLY FIND NO. 34 TO MATING SURFACES OF FIND NO. 4, 9, 10, 33, 36, 40
- DO NOT APPLY TO BONDED RUBBER OF FIND NO. 4, 35, 36, 40
- AR DENOTES AS REQUIRED
- MOUNTING TORQUE FOR FIND NO. 16, 18, 37 TO BE 8-9 INCH POUNDS
- MOUNTING TORQUE FOR FIND NO. 26 TO BE 35-45 INCH POUNDS
- FILL FEMALE INSULATORS OF FIND NO. 4, 35 OR 36 USING SILICONE COMPOUND PER 1008954 PRIOR TO ASSEMBLY OF FIND NO. 2 AND FIND NO. 3
- FIND NO. 2 & 3 TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 4, 35 OR 36 USING FIND NO. 19 BEFORE INSTALLING FIND NO. 37
- FILL FEMALE INSULATOR OF FIND NO. 40 USING SILICONE COMPOUND PER 1008954 PRIOR TO ASSEMBLY OF FIND NO. 3 FINE NO. 3
- TO BE ASSEMBLED TO HEIGHT OF BONDED RUBBER OF FIND NO. 40 USING FIND NO. 19 BEFORE INSTALLING FIND NO. 37. FIND NO. 41 TO BE INSTALLED USING EXISTING JACKING SCREWS
- The -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037, -038, -039, -040, -041, -042, -043, -044, -045, -046, -047, -048, -049, -050, -051, -052, -053, -054, -055, -056, -057, -058, -059, -060, -061, -062, -063, -064, -065, -066, -067, -068, -069, -070, -071, -072, -073, -074, -075, -076, -077, -078, -079, -080, -081, -082, -083, -084, -085, -086, -087, -088, -089, -090, -091, -092, -093, -094, -095, -096, -097, -098, -099, -100, -101, -102, -103, -104, -105, -106, -107, -108, -109, -110, -111, -112, -113, -114, -115, -116, -117, -118, -119, -120, -121, -122, -123, -124, -125, -126, -127, -128, -129, -130, -131, -132, -133, -134, -135, -136, -137, -138, -139, -140, -141, -142, -143, -144, -145, -146, -147, -148, -149, -150, -151, -152, -153, -154, -155, -156, -157, -158, -159, -160, -161, -162, -163, -164, -165, -166, -167, -168, -169, -170, -171, -172, -173, -174, -175, 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